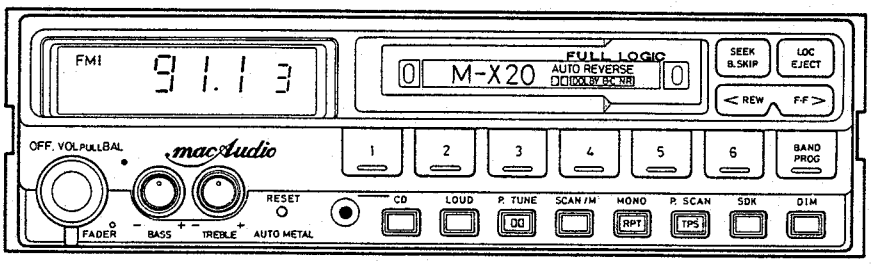
macAudio®
SOUND SYSTEMS FOR CARS

SERVICE MANUAL

Model M-X20

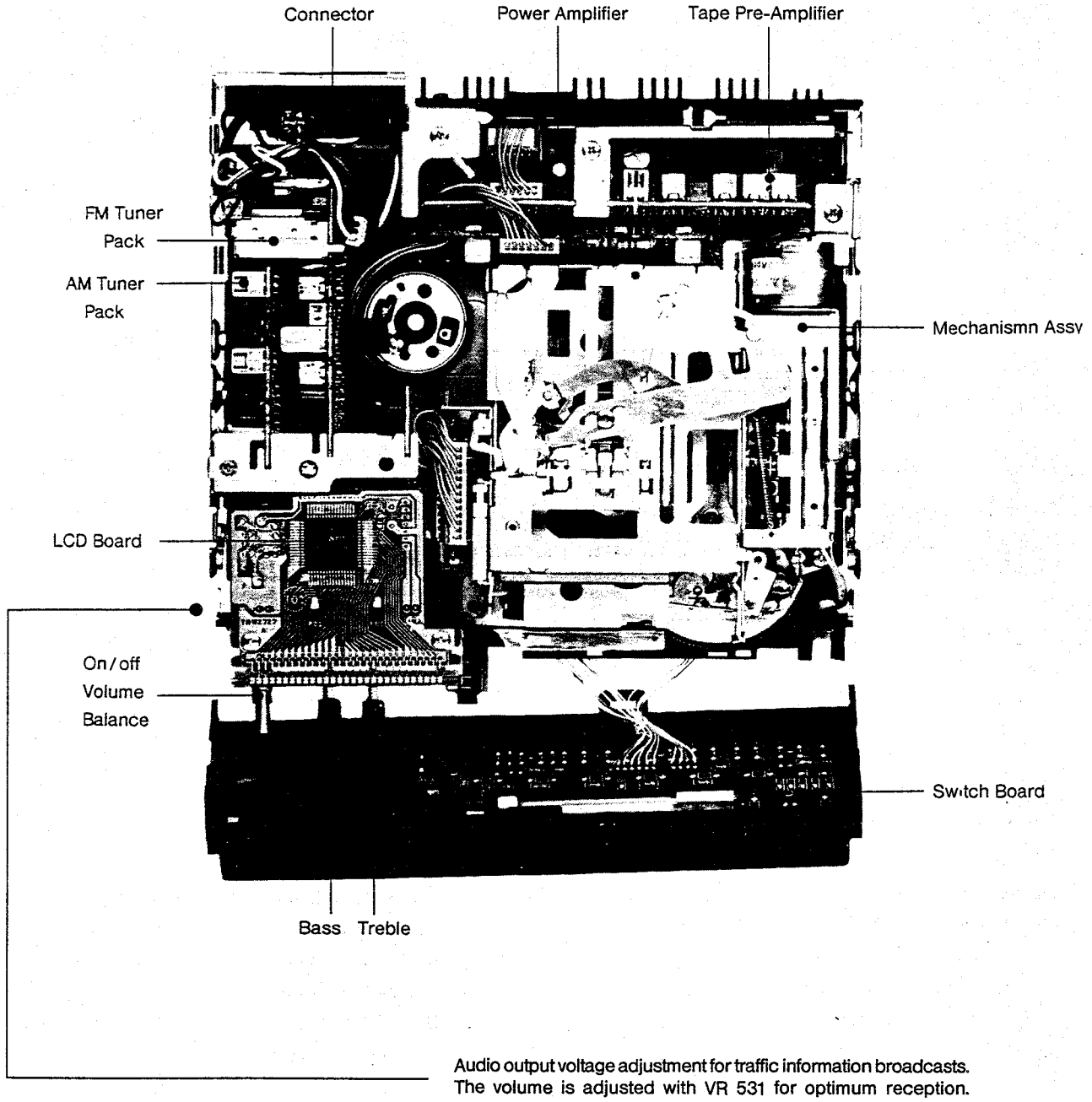


Contents

	Page
1 Location of Main Parts	2
2 Removal of Main Parts	3
3 Main Adjustments	7
■ Location of Adjustment	8
■ Routine of Adjustment	9
■ Cassette Section	10
4 Block Diagram	11
6 Standard Schematic Diagram	12
■ Schematic Diagram	13
■ Schematic Diagram	15
■ Schematic Diagram	16
■ Schematic Diagram	17
5 Wiring connections	14
7 Location of Board and Parts List	
■ Drive Board, Head Board etc	18
■ Switch Board	19
■ Connector Board	20
■ LCD Board	21
■ Main PC Board	22
■ AM + FM Board	23
8 Exploded View of Enclosure Assembly	31
9 Exploded View of Mechanismn Component	32
■ Parts List	33
10 Packing	37

Mac Audio Electronic GmbH
Diepholzer Straße 5
Postfach 15 55
2870 Delmenhorst
Tel.: 0 42 21 - 7 98-0 · Telefax 0 42 21 - 7 98 49

1 Location of Main Parts



Audio output voltage adjustment for traffic information broadcasts.
The volume is adjusted with VR 531 for optimum reception.

2 Removal of Main Parts

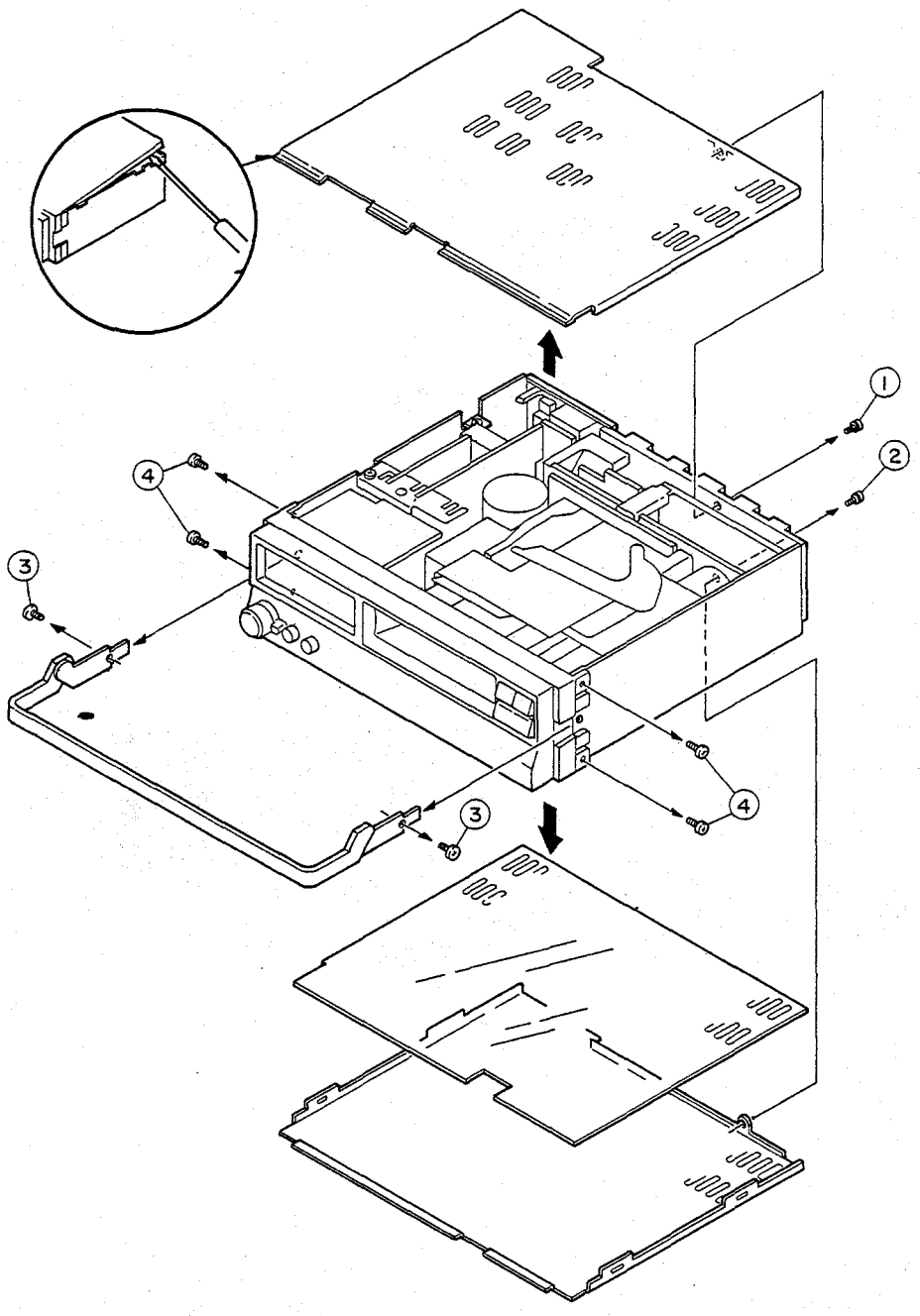
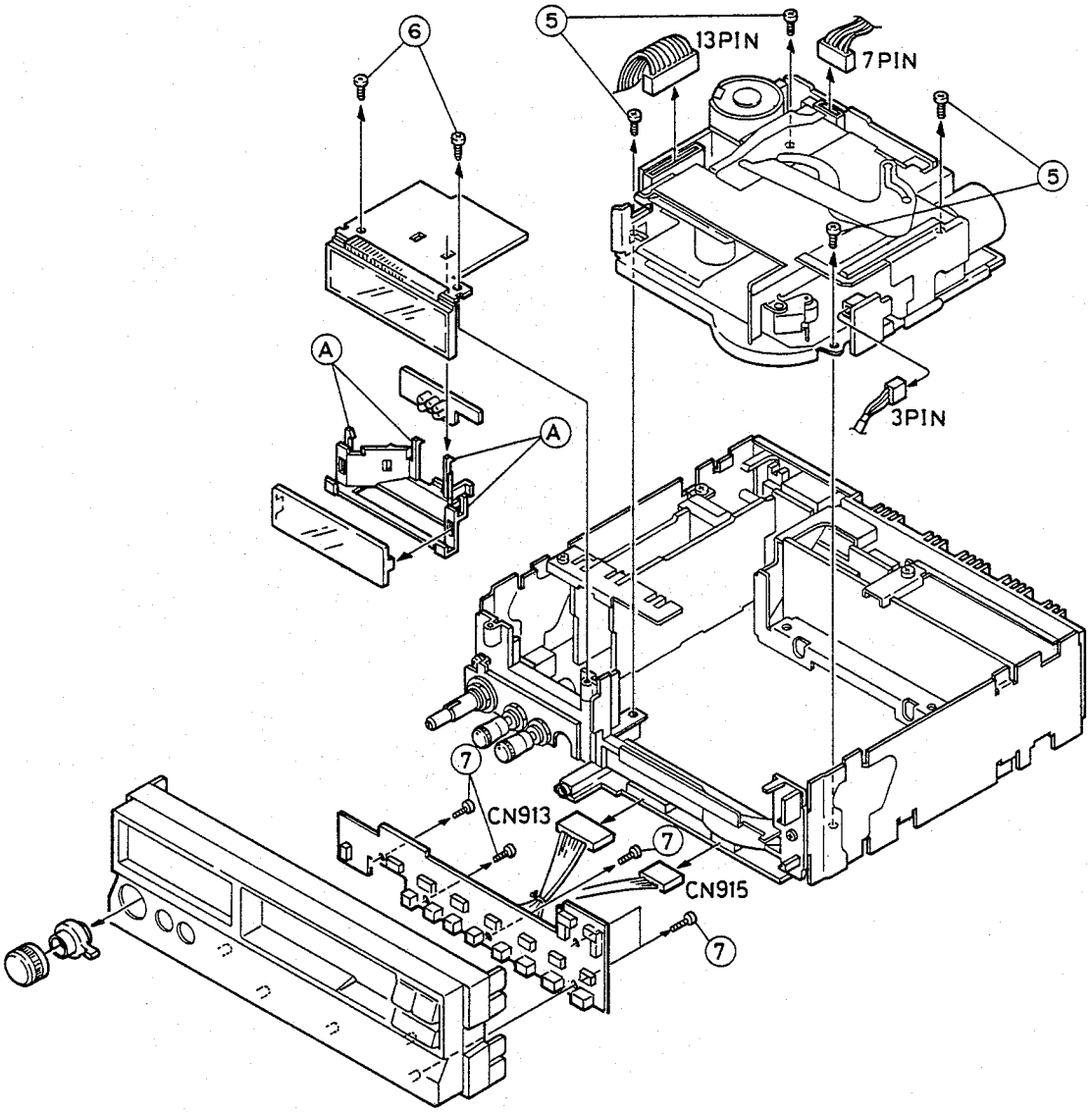


Fig. 3-1

(1) Top Cover and Bottom Cover
1) Remove one screw (1) retaining the rear pannel.
2) As shown in the figure, insert a screwdriver in the Spaces between the main unit and the Top Covers to release the locks.
3) Remove one screw (2) retaining the rear pannel.
4) All the same to 2), insert a screwdriver in the Spaces between the main unit and the bottom covers to release the locks.

(2) Nose Piece Assembly
1) Remove the volume and balance knob
2) Remove the two screws (3) holding the handle from both sides.
3) Remove the four screws (4) from both sides of the nose piece Assembly.
4) Use a screwdriver to release the joining sections in four locations between the nose piece and both sides of the main unit.



(3) Mechanism Assembly

1) Remove the four screws ⑤ retaining the mechamism assembly.

2) Remove the three Connectors

- CP 802 plug (CJ 802) on the head wire.
- CP 852 plug (CJ 852) on the drive control board.
- CP 801 plug (CJ 801) on the mechanism control switch board.

(4) LCD Board

1) Remove the two screws ⑥ retaining the LCD board from the front Chassis.

2) Release the four joining sections Ⓐ from the LCD board.

(5) Switch Board

1) Remove the two Connector (CN 913, CN 915) from main board.

2) Remove the five screws ⑦ Securing the Switch Board.

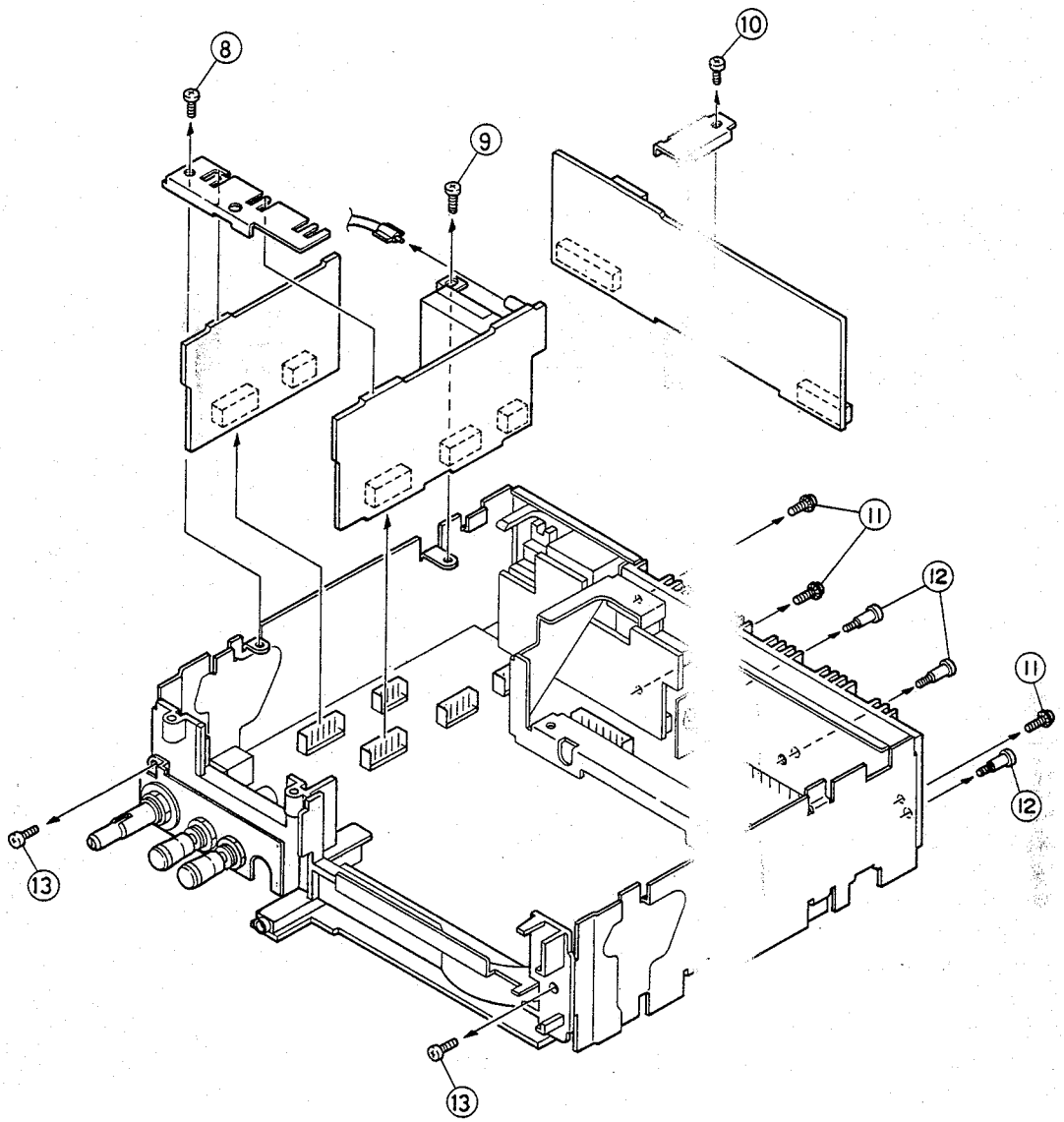


Fig. 3-3

(6) IF Board
1) Remove the screw (8) retaining the tuner board holder from the side bracket Assembly.
2) Remove the screw (9) retaining the IF board from the side bracket Assembly.
3) Pull out the antenna cord from CJ922 and Pull out IF board from the main board.

(7) Dolby NR & LINE IN board
1) Remove the screw (10) retaining the board holder from IC ket.
2) Pull out CP911 from CN911.
3) Pull out olby NR & LINE IN board from CJ906 and CJ9

(8) Heat Sink ide Bracket
1) Remove ix screws (11) and (12) retaining the heat sin
2) Remove wo screws (13) retaining the side bracket.

Mechanism Assembly

■ Playback Head (52)

1. Remove the two screws (58).
2. Remove the screw (90) from the head board.
3. Pull off the head mounting base (20).
4. Remove the two screws (53) from the front surface of the head.
5. Remove the wiring from the head board.

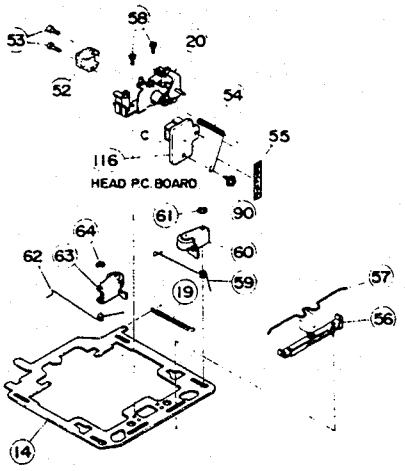


Fig. 3-4

■ Capstan Motor (68)

1. Remove the two screws (72) from the bottom of the chassis.
2. Remove the belt from the pulley. (The belt 80 is on the motor side.)
3. Remove the wiring for the motor.
4. Pull off the pulley (69).

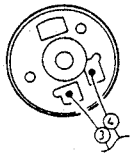


Fig. 3-5

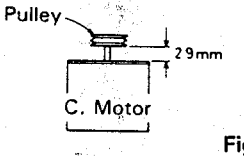


Fig. 3-6

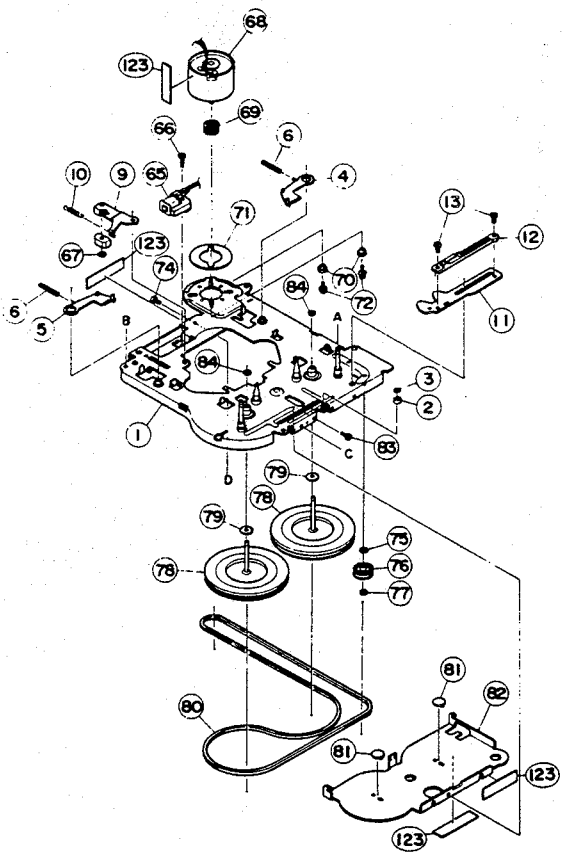


Fig. 3-8

■ A. Motor (47)

1. Remove the three screws (87), and the E ring (88), then lower the L/E slider 100.
2. Remove the screw (86).
3. Remove the Actuator motor along with the Actuator gear assembly.
4. Remove the two screws (51), then take off Actuator Gear (1) (50) and the Actuator bushing (49).
5. Remove the wiring.
   - When reinstalling, install so that the head points in the FWD direction, and the direction plate (56) and actuator plate (11) in the drive board direction.

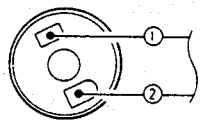


Fig. 3-7

■ Flywheel Bracket (82)

1. Remove the screw (83).
2. Remove the flywheel bracket while pressing in the direction of the AUTO board.

   ↓

   The belt (80) and the flywheel assembly (78) can be replaced.

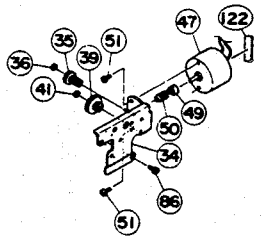


Fig. 3-9

3 Main Adjustments

1. Equipment and measuring instruments used for adjustments

- Electronic voltmeter
- Audio frequency oscillator
- Attenuator (impedance 600 Ω)
- Wow-flutter meter
- Frequency counter
- Torque testing Cassette gauge CTG-N
- Mirror tape
- AM Standard Signal Generator
- FM Standard Signal Generator
- Alignment Tape
  VTT703, VTT721, VTT712, VTT736

2. Condition for Measurement

Power Supply ..... DC 14.4 V (reduced voltage: 10.5 V)
Load ..... 4 Ω (Four Speakers Connection)
Reference Output ..... 300 mV

Bass/Treble .....Center
Fader .....Center
Volume .....Position with an output of 2.5 V during VTT724 playback.

- Preset Memory of Initialize

Band	Preset Memory						Remarks
	M1	M2	M3	M4	M5	M6	
FM (MHz)	87.5	89.9	97.9	105.9	107.9	87.5	
AM (kHz)	530	603	1000	1400	1500	1710	C/J
	531	603	999	1404	1620	531	A/U

- Manual Tuning Up/Down Frequency

FM ..... 200 kHz Step (C/J) 100 kHz Step (A/U) AM ..... 10 kHz Step (C/J) 9 kHz Step (A/U)

- Setting of Reference Frequency

FM ... 400 Hz, 22.5 kHz Deviation

FM STEREO ... 1 kHz, 67.5 kHz Deviation Pilot Signal 7.5 kHz

AM ... 400 Hz, 30% Modulation

Output Impedance ... 50 Ω

Dummy Loads
Use the special dummy loads for both FM and AM. However, there is a loss of 6 dB between the SSG output and antenna input when the FM dummy is used. In this service manual, this 6 dB loss is ignored and the SSG values are used are direct readings.

- Reference Output

FM ... 66 dBμV, 97.9 MHz

AM ... 74 dBμV, 999 kHz (A/U), 1000 kHz (C/J)

■ Location of Adjustment

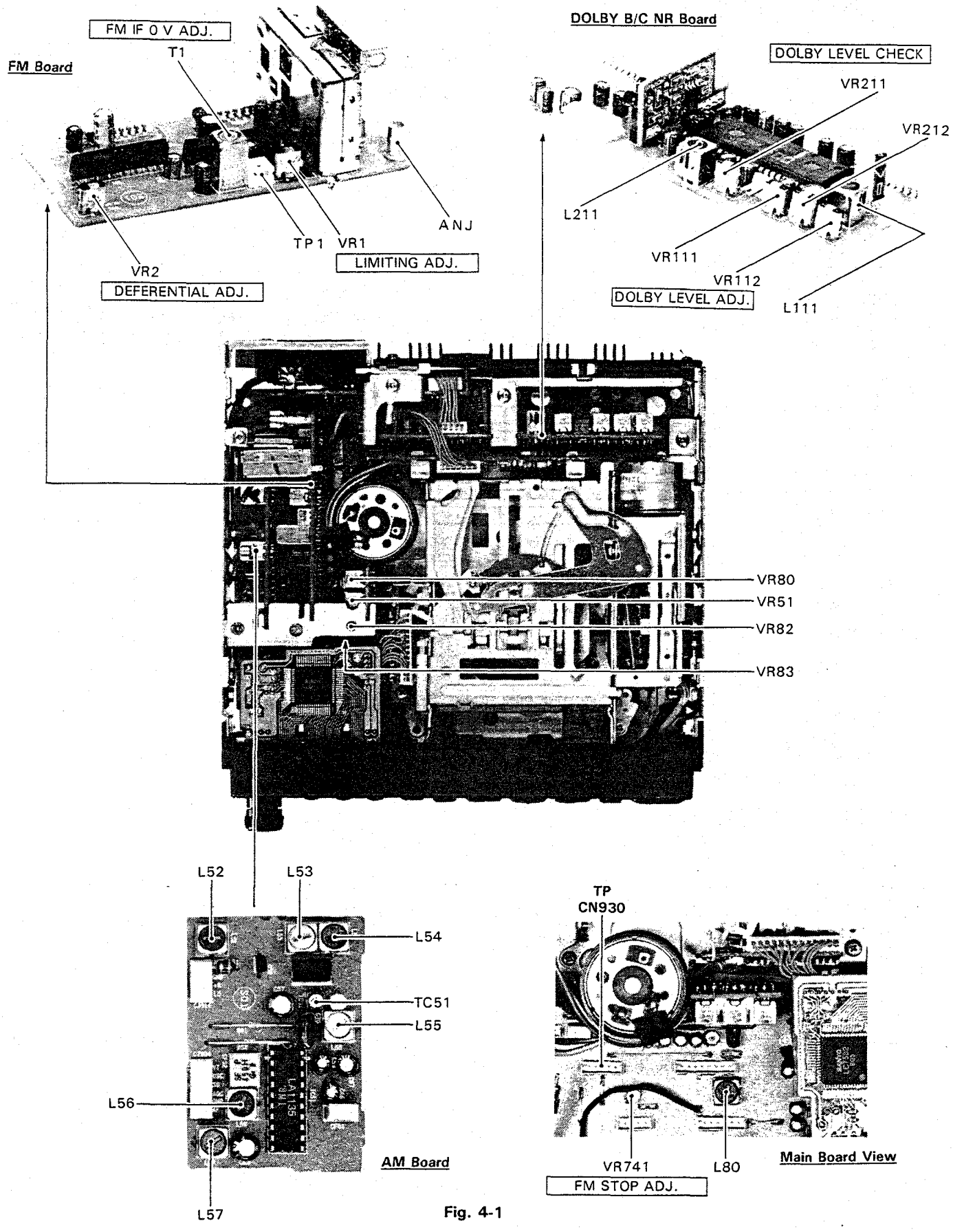


Fig. 4-1

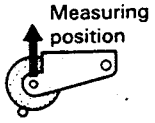
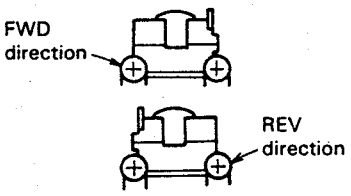
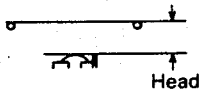
3. Routine of Adjustment

No.	Item	Check Point	Adjustment Point	Condition	Adjustment • Confirmation
1	FM IF 0 V Adjustment	TP1 (Both Terminal)	T1	SSG ——— Reference frequency: non modulated	Adjust T1 so that the TP1 DC level is 0 V±10 mV while receiving.
2	FM limiting Adjustment	AF Out	VR1	Receiving frequency 97.9 MHz 66 dBμV→0 dBμV	Adjust VR1 so that the AF output difference is −20 dB when the SSG output is brought from 66 dBμV to 0 dBμV in reception mode.
3	FM stereo Separation Adjustment	AF Out	VR3	Stereo Rch: Reference output	1) First, turn VR2 to the left. 2) In reception mode, adjust VR3 to minimize the left channel output.
4	Deferential Adjustment	AF Out	VR2	Stereo Rch: 52 dBμV	In reception mode, adjust VR2 so that the separation is 17 dB.
5	FM Seek STOP Adjustment	TP SD	VR741 · G Version : VR521	SSG ——— Receiving frequency: 97.9 MHz 26 dBμ	Adjust VR741 so that SD is set exactly from 0 to 5 with the SSG 97.9 MHz 30 dBμ.
6	MW VT Adjustment	CN902: 3 Pin	TC51,TC52 L57 TC51	Receiving frequency 522 kHz Receiving frequency 1620 kHz	1) Turn TC51, TC52 90° so that it is at the mechanical center. 2) Adjust L57 so that CN902 3 pin is 1.2 V for reception at 522 kHz. 3) Adjust TC51 so taht CN902 3 pin is 7.8 V for reception at 1620 kHz. 4) Return to 2) and readjust. Then confirm the standard value of 3), and if it does not meet the standard, adjust again. The procedure is completed when adjustment 2) has been done and when the standard value 3) has been confirmed. Standard value 522 kHz: 1.2 V±0.05 V 1620 kHz: 7.5 V±0.05 V
7	MW tracking Adjustment		L53,L54 L60 TC51	SSG: Low input so that the output peak can be defected 1404 kHz	1) Adjust L53, L54 and L60 so that the output peaks during 603 kHz reception. 2) Adjust TC51 so that the output peaks during 1404 kHz reception. Standard value 1620 kHz: less than 8 V
8	LW VT Adjustment		L58 TC52	Receiving frequency 144 kHz	1) Adjust L58 so that is 1.2 V for reception at 144 kHz. 2) Adjust TC52 so that is 5.0 V for reception at 281 kHz. 3) Return to 1) and readjust. Then confirm the standard value of 2), and if it does not meet the standard, adjust again. The procedure is completed when adjustment 1) has been done and when the standard value 2) has been confirmed. Standard value 144 kHz: 1.2 V±0.1 V 281 kHz: 5.0 V±0.1 V
9	LW tracking Adjustment		L55,L56	SSG: Low input so that the output peak can be defected 153 kHz	Adjust L55, L56 so that the output peaks during 153 kHz reception.

4. Cassette Section Adjustment

Item	Tape used	Adjustment checking method	Standard	Adjustment position
Tape speed check	VTT 712	Check a portion which is near the end of winding for both FWD and REV.	2,940 Z 3,060 Hz	
Wow-Flutter Check	VTT 712	Check bith FDW and REV.	JIS WTD 0.18% or less	
Dolby level check	VTT 724	Adjust VR 111/VR 211 so that the output level at terminals TP 111 and TP 211 is 211 mV.	211 mV (If there is an output difference between FWD and REV, adjust between 200 and 224 mV.)	L ch VR 111 R ch VR 211
Playback frequency response	VTT 739	Measure deviations of 1 kHz and 10 kHz.	Play back test tape VTT 739. Adjust VR112, VR 212 so that the test point level difference of 1 kHz/10 kHz becomes 1 e 1 [dB]. Also confirm that the VTT 739 of the METAL Half is – 4 e 3 [dB].	
Checking maximum output	VTT 721	Measure at maximum volume with the speaker terminal at a load of 4 Ohm	Load: Speaker 4 Ohm Front: 8,5 V or more LINE OUT: 500 e 50 mV	
Music Scan operation check	TMT 6447 TMT 6448	Conduct Musik Scan operation at TMT 6447. Do not conduct Music Scan operation at TMT 6448.		

5. Cassette Mechanism Section adjustment and Specifications

Item	requirements	Test equipment	
Source voltage	DC 13.2 V e 20%	Regulated power supply	
Take-up torque	PLAY: 35 Z 75 gr-cm FF/REW: 80 Z 160 gr-cm	Cassette type TW 211 A, TW 2121 A	
Pinch roller pressure	350 Z 500 g	Tension gauge Pull the pinch roller perpendicularly and read the gauge when the pinch roller just stops.	
FF/REW time	Less than 100 sec with C-60 cassette		
Azimuth	VTT 703L	1) Play back the VTT 7032 test tape. 2) Obtain maximum playback output for this adjustment. Tighten the screw until the no phsse difference condition becomes about 90° C phase. (The FWD/REV difference should be 3 dB or less.)	 (After adjustment, secure with the "1407C" screw lock.)
Head "	Dial guage	 Playback: 3.7 Z 3.8 mm With MS: 4.4 Z 5.7 mm	
DK free run Adjustment		frequency counter	Press the SK/DK button, make sure that there is no antenna input and adjust VR 510 so that the output of the test point becomes 125 e 1 [Hz]. After adjustment, confirm that the output is from 123 to 127 [Hz].

4 Block Diagram

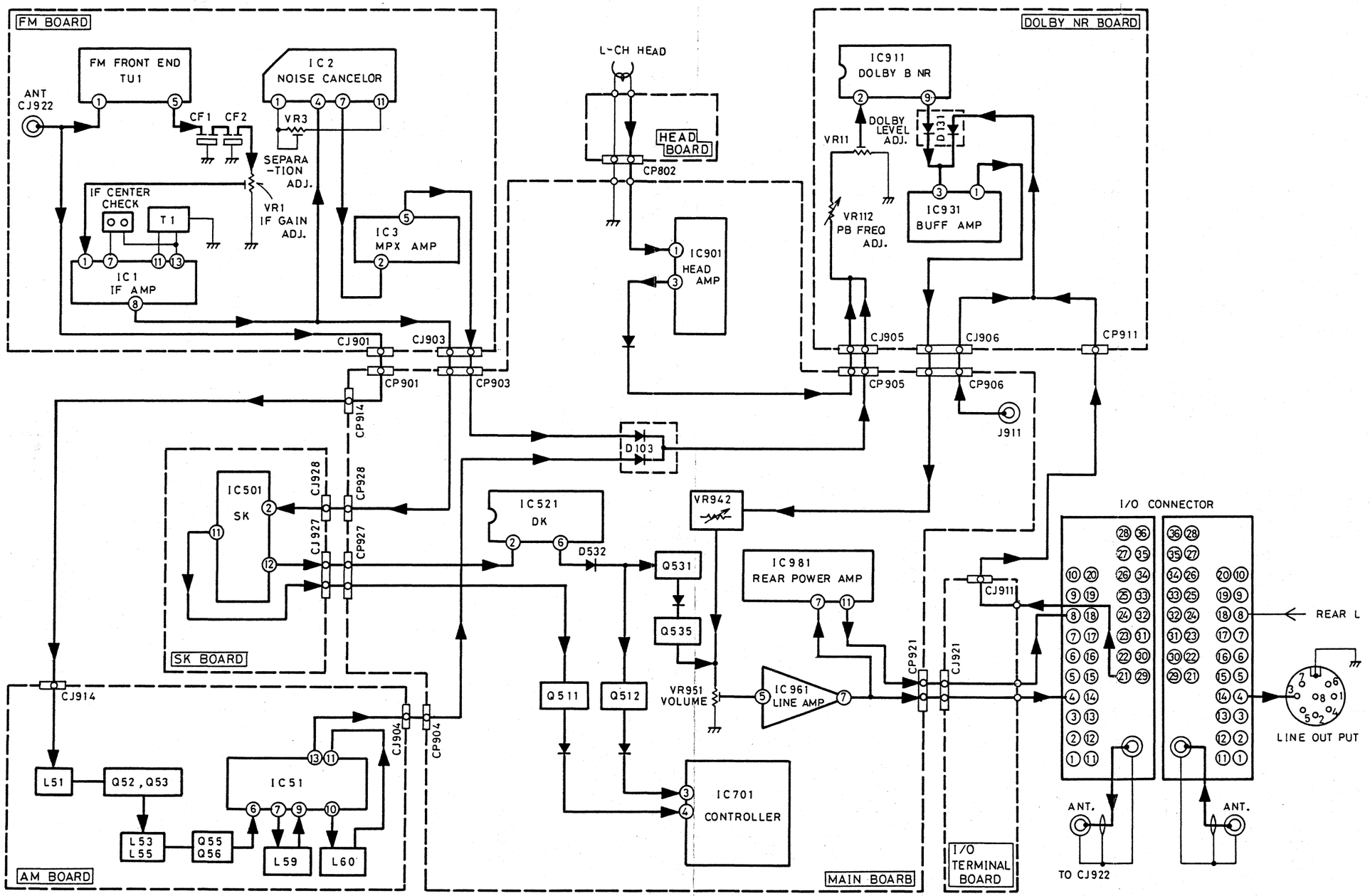
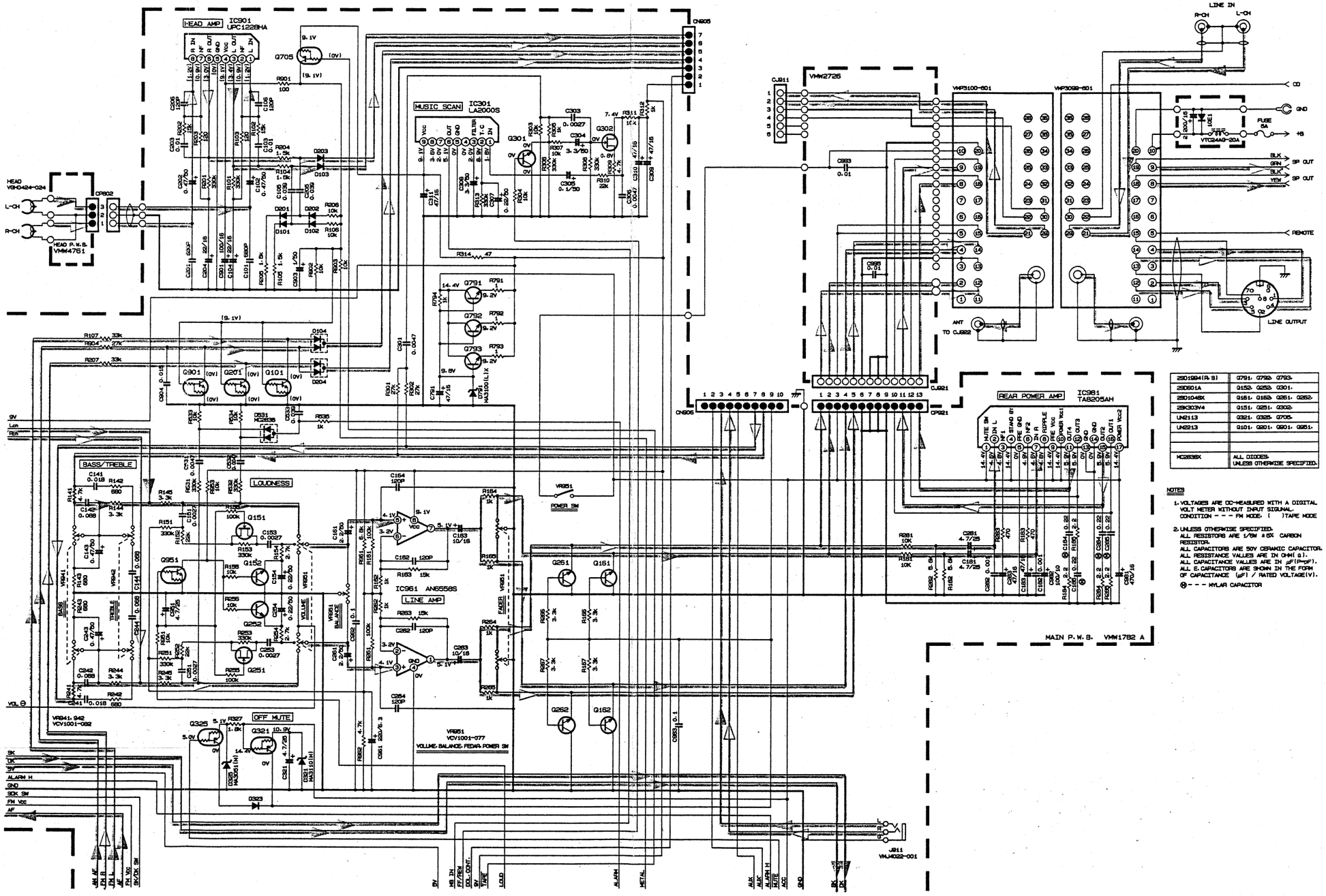


Fig. 4-1

6 Standard Schematic Diagram



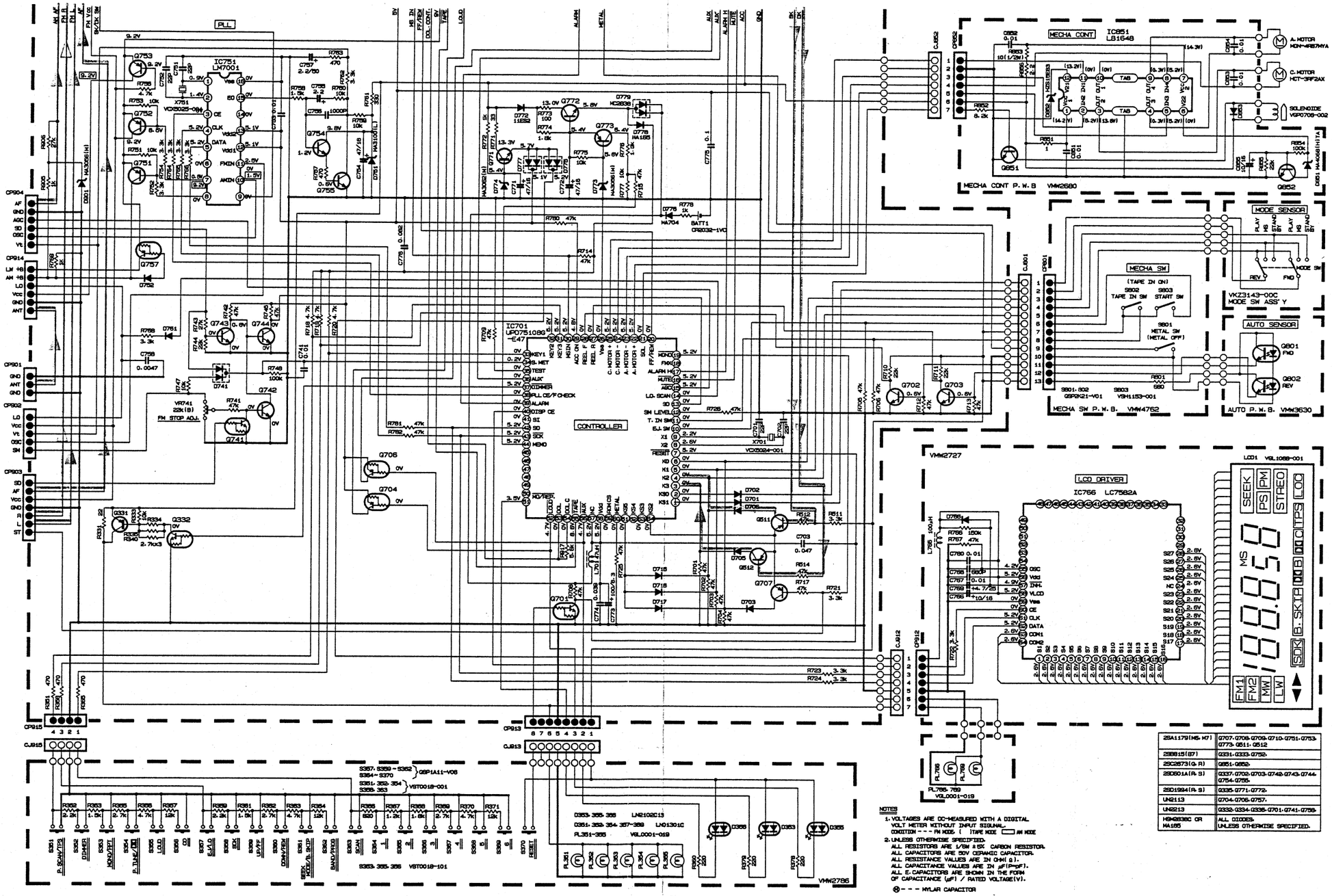
2SD1994(A,S)	Q791, Q792, Q793,
2SD601A	Q152, Q252, Q301,
2SD1048K	Q151, Q152, Q251, Q252,
2SK303Y4	Q151, Q251, Q302,
UN2113	Q321, Q325, Q705,
UN5213	Q101, Q201, Q901, Q951,
MC2838K	ALL DIODES UNLESS OTHERWISE SPECIFIED.

NOTES

1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER WITHOUT INPUT SIGUNAL.
   CONDITION - - - FM MODE. ( )TAPE MODE
2. UNLESS OTHERWISE SPECIFIED.
   ALL RESISTORS ARE 1/8W ±5% CARBON RESISTOR.
   ALL CAPACITORS ARE 50V CERAMIC CAPACITOR.
   ALL RESISTANCE VALUES ARE IN OHM(Ω).
   ALL CAPACITANCE VALUES ARE IN μF(P=pF).
   ALL E.CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE (μF) / RATED VOLTAGE(V).
   ⊕ - - - MYLAR CAPACITOR

Fig. 6-1

■ Schematic Diagram



2SA1179(M6·M7)	Q707·Q708·Q709·Q710·Q751·Q753·Q773·Q511·Q512
2SB815(87)	Q331·Q333·Q752·
2SC2873(Q·R)	Q851·Q852·
2SD601A(P·S)	Q337·Q702·Q703·Q742·Q743·Q744·Q754·Q755·
2SD1994(P·S)	Q335·Q771·Q772·
UN2113	Q704·Q706·Q757·
UN2213	Q332·Q334·Q336·Q701·Q741·Q755·
HSM2836C OR HA1165	ALL DIODES. UNLESS OTHERWISE SPECIFIED.

NOTES
1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER WITHOUT INPUT SIGUNAL.
CONDITION - - - FM MODE: ( ) TAPE MODE [ ] AM MODE
2. UNLESS OTHERWISE SPECIFIED.
ALL RESISTORS ARE 1/8W ±5% CARBON RESISTOR.
ALL CAPACITORS ARE 50V CERAMIC CAPACITOR.
ALL RESISTANCE VALUES ARE IN OHM(Ω).
ALL CAPACITANCE VALUES ARE IN μF(P=pF).
ALL E. CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE (μF) / RATED VOLTAGE(V).
⊕ - - - MYLAR CAPACITOR

Fig. 6-2

5 Wiring Connections

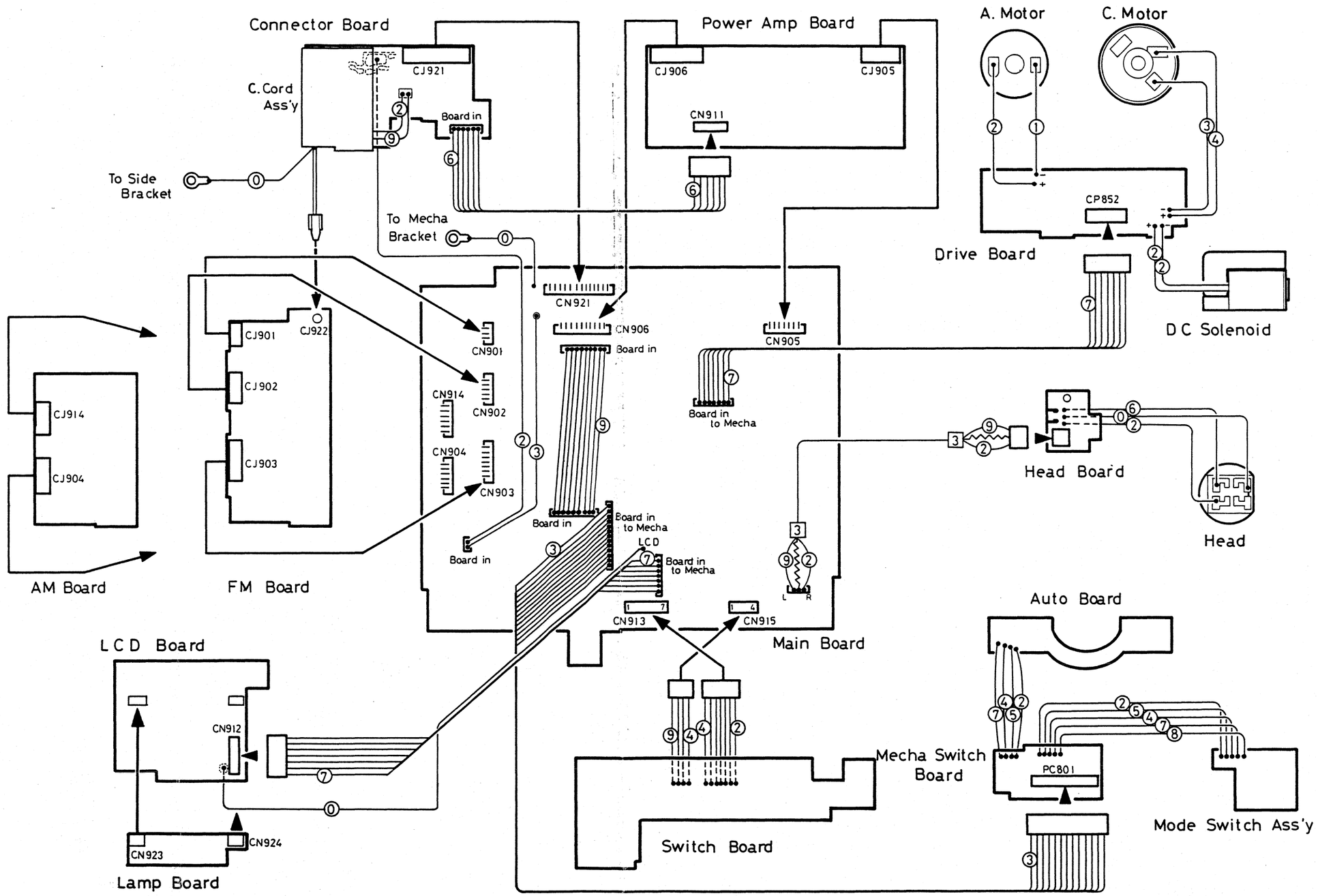
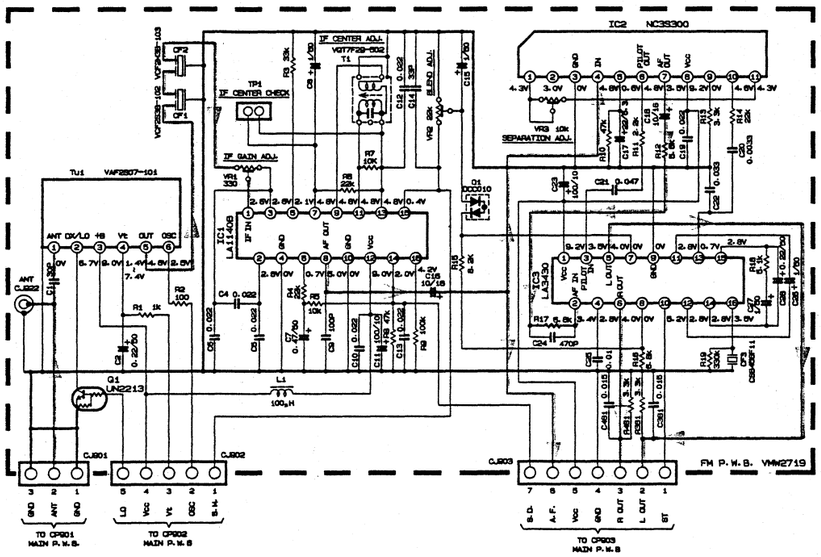
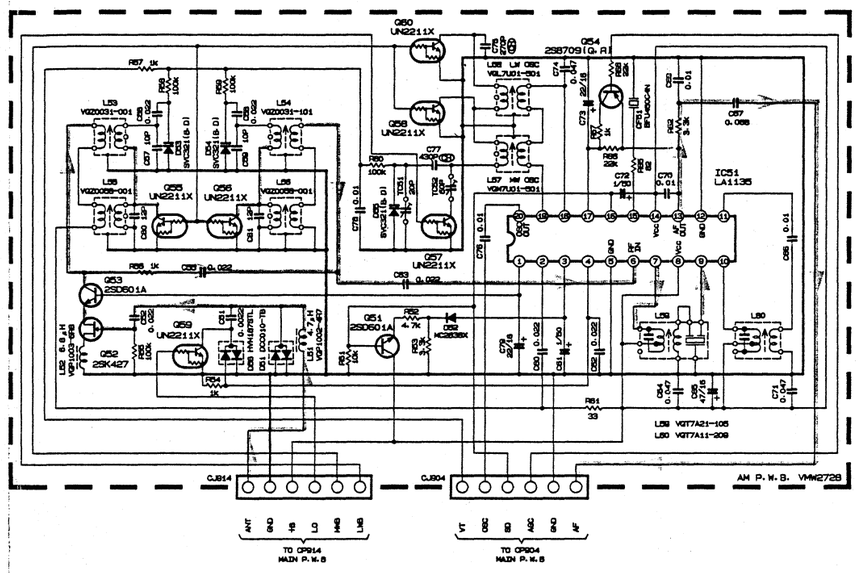
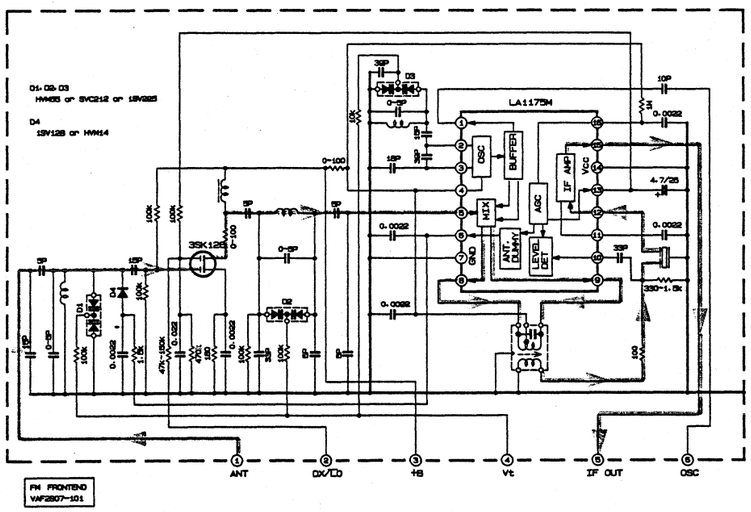


Fig. 5-1

■ Schematic Diagram





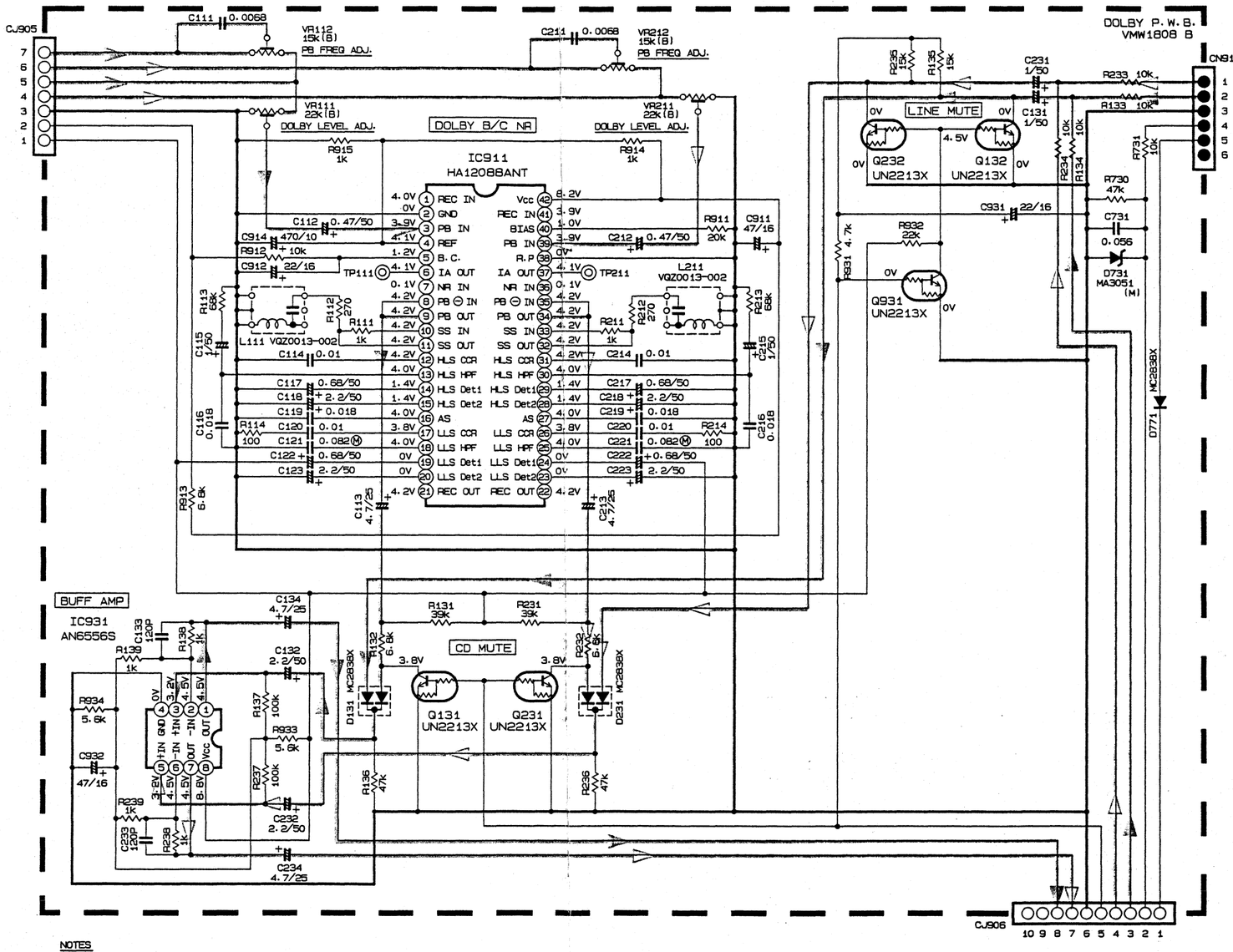


NOTES

1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER WITHOUT INPUT SIGNAL.
   CONDITION——FM MODE; ▭ AM MODE
2. UNLESS OTHERWISE SPECIFIED.
   ALL RESISTORS ARE 1/6W ±5% CARBON RESISTOR.
   ALL CAPACITORS ARE 50V CERAMIC CAPACITOR OR 50V MYLAR CAPACITOR.
   ALL RESISTANCE VALUES ARE IN OHM(Ω).
   ALL CAPACITANCE VALUES ARE IN μF(P=pF).
   ALL E-CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE(μF)/RATED VOLTAGE(V).

Fig. 6-3

■ Schematic Diagram



NOTES

1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER WITHOUT INPUT SIGNAL.
   CONDITION — — — FM MODE
2. UNLESS OTHERWISE SPECIFIED.
   ALL RESISTORS ARE 1/6W ±5% CARBON RESISTOR.
   ALL CAPACITORS ARE 50V CERAMIC CAPACITOR OR 50V MYLAR CAPACITOR.
   ALL RESISTANCE VALUES ARE IN OHM(Ω).
   ALL CAPACITANCE VALUES ARE IN μF(P=pF).
   ALL E.CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE(μF)/RATED VOLTAGE(V).

Fig. 6-4

7 Location of PC Board and Part List

■ Drive Board

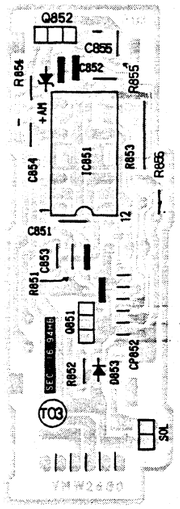


Fig. 7-1

■ Head Board

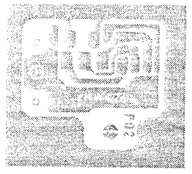


Fig. 7-2

■ Mecha. Switch Board

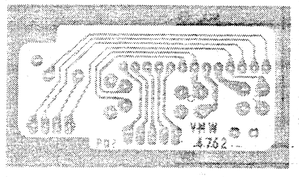


Fig. 7-3

■ Auto Board

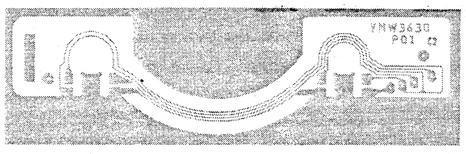


Fig. 7-4

■ Drive Board Parts List

⚠	REF. NO	PARTS NO.	PARTS NAME
	C851	QCVB1CM-103Y	C.CAPACITOR
	C852	QCVB1CM-103Y	C.CAPACITOR
	C853	QCVB1CM-103Y	C.CAPACITOR
	C854	QCVB1CM-103Y	C.CAPACITOR
	C855	QER41CM-106VM	E CAPACITOR
	D851	MA4068(H)TA	Z DIODE
	D852	HZS15EB3	Z DIODE
	D853	HSS104TJ	SI DIODE
	IC851	LB1648	IC
	Q851	2SC2673(Q,R)	TRANSISTOR
	Q852	2SC2673(Q,R)	TRANSISTOR
	R851	QRD161J-1R0Y	CARBON RESISTOR
	R852	QRD161J-822Y	CARBON RESISTOR
	R853	QRD121J-100	CARBON RESISTOR
	R854	QRD161J-104Y	CARBON RESISTOR
	R855	QRD161J-223Y	CARBON RESISTOR
	R856	QRD161J-2R2Y	CARBON RESISTOR

■ Head/Mecha. Switch/Auto Board Parts List

⚠	REF. NO	PARTS NO.	PARTS NAME
	CP801	VMC0064-013	CONNECTOR
	CP802	VMC0064-003	CONNECTOR
	Q801	NJL5163K(A,B)	PHOTO CAPLOR
	Q802	NJL5163K(A,B)	PHOTO CAPLOR
	R801	QRD167J-681	C RESISTOR
	S801	QSP2K21-V01	PUSH SWITCH
	S802	QSP2K21-V01	PUSH SWITCH
	S803	VSH1153-001	SWITCH

■ Switch Board

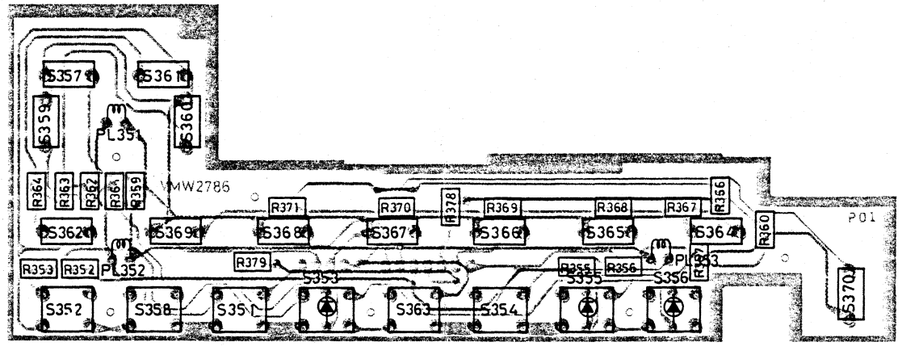


Fig. 7-5

■ Switch Board Parts List

⚠	REF. NO	PARTS NO.	PARTS NAME	DESCRIPTION
	PL351	VGZ0001-019	LAMP	
	PL352	VGZ0001-019	LAMP	
	PL353	VGZ0001-019	LAMP	
	R352	NRSA02J-222NY	MG RESISTOR	
	R353	NRSA02J-152NY	MG RESISTOR	
	R355	NRSA02J-272NY	MG RESISTOR	
	R356	NRSA02J-472NY	MG RESISTOR	
	R357	NRSA02J-123NY	MG RESISTOR	
	R359	NRSA02J-222NY	MG RESISTOR	
	R360	NRSA02J-221NY	MG RESISTOR	
	R361	NRSA02J-152NY	MG RESISTOR	
	R362	NRSA02J-272NY	MG RESISTOR	
	R363	NRSA02J-472NY	MG RESISTOR	
	R364	NRSA02J-123NY	MG RESISTOR	
	R366	NRSA02J-821NY	MG RESISTOR	
	R367	NRSA02J-122NY	MG RESISTOR	
	R368	NRSA02J-182NY	MG RESISTOR	
	R369	NRSA02J-272NY	MG RESISTOR	
	R370	NRSA02J-472NY	MG RESISTOR	
	R371	NRSA02J-123NY	MG RESISTOR	
	R378	NRSA02J-221NY	MG RESISTOR	
	R379	NRSA02J-221NY	MG RESISTOR	
	S351	VST0018-001	TACT SWITCH	
	S352	VST0018-001	TACT SWITCH	
	S353	VST0018-101	TACT SWITCH	
	S354	VST0018-001	TACT SWITCH	
	S355	VST0018-101	TACT SWITCH	
	S356	VST0018-101	TACT SWITCH	
	S357	QSP1A11-V06	TACT SWITCH	
	S358	VST0018-001	TACT SWITCH	
	S359	QSP1A11-V06	TACT SWITCH	
	S360	QSP1A11-V06	TACT SWITCH	
	S361	QSP1A11-V06	TACT SWITCH	
	S362	QSP1A11-V06	TACT SWITCH	
	S363	VST0018-001	TACT SWITCH	
	S364	QSP1A11-V06	TACT SWITCH	
	S365	QSP1A11-V06	TACT SWITCH	
	S366	QSP1A11-V06	TACT SWITCH	
	S367	QSP1A11-V06	TACT SWITCH	
	S368	QSP1A11-V06	TACT SWITCH	
	S369	QSP1A11-V06	TACT SWITCH	
	S370	QSP1A11-V06	TACT SWITCH	

■ Schematic Diagram

NOTES

1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER WITHOUT INPUT SIGNAL.
   CONNITION —— FM MODE.
2. UNLESS OTHERWISE SPECIFIED.
   ALL RESISTORS ARE 1/6W ±5% CARBON RESISTOR.
   ALL CAPACITORS ARE 50V CERAMIC CAPACITOR OR 50V MYLAR CAPACITOR.
   ALL RESISTANCE VALUES ARE IN OHM(Ω).
   ALL CAPACITANCE VALUES ARE IN μF(P=pF).
   ALL E.CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE(μF)/RATED VOLTAGE(V).
   Ⓜ - - - MYLAR CAPACITOR

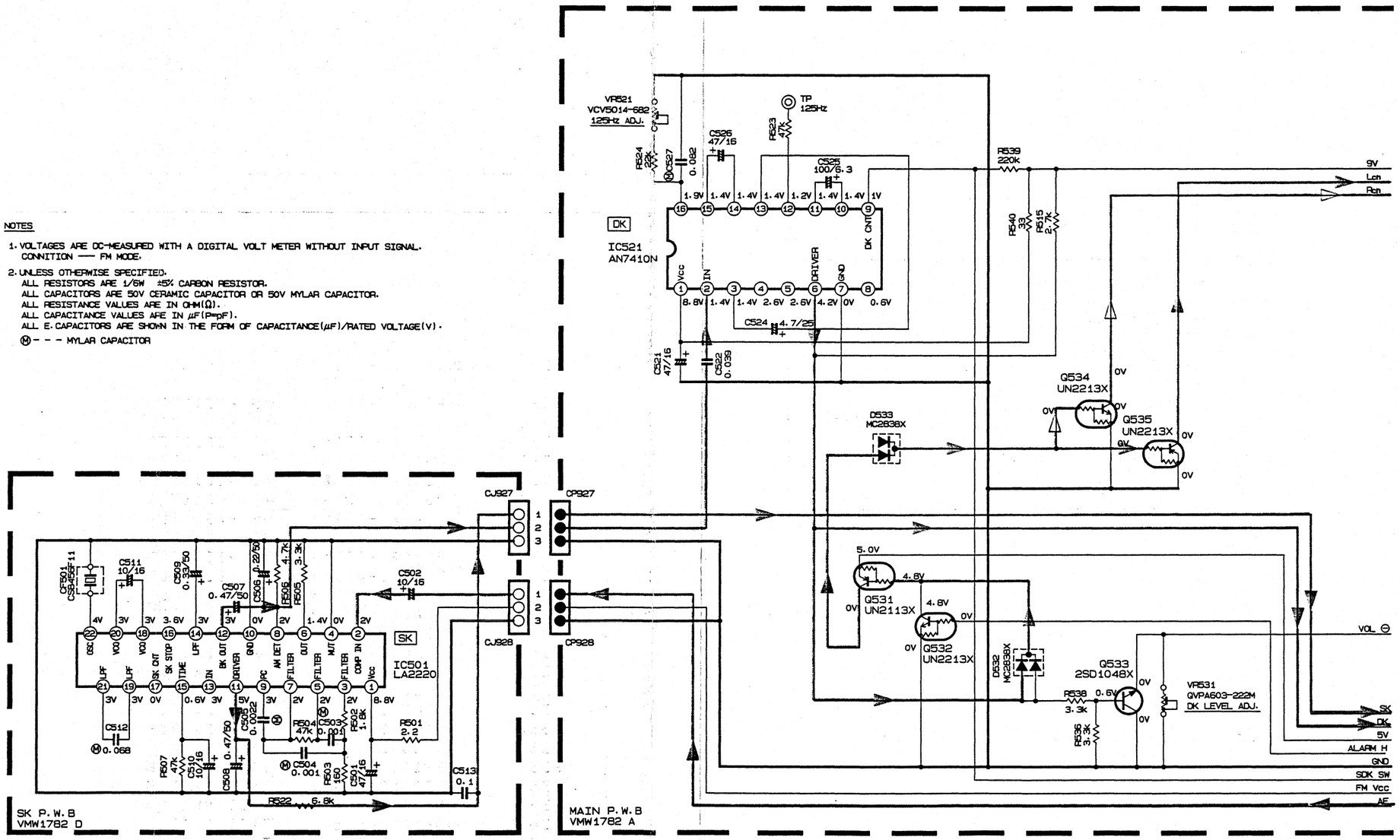


Fig. 6-5

■ Connector Board

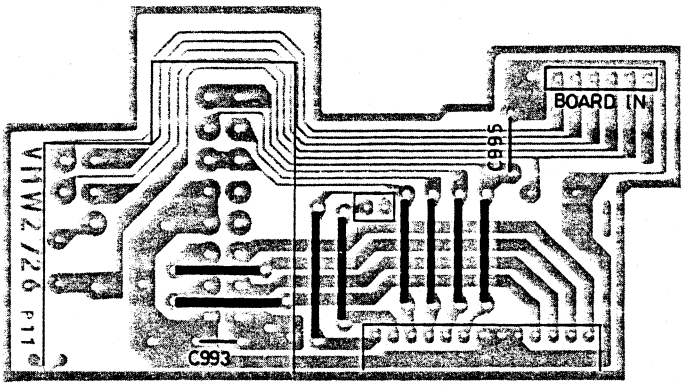


Fig. 7-6

■ Connector Board Parts List

⚠	REF. NO	PARTS NO.	PARTS NAME	DESCRIPTION
	CJ921	VMC0136-013	CONNECTOR	
	C993	QCVB1CM-103Y	C CAPACITOR	.010MF 20% 16V
	C995	QCC11EM-104V	C CAPACITOR	.10MF 20% 25V

■ LCD Board

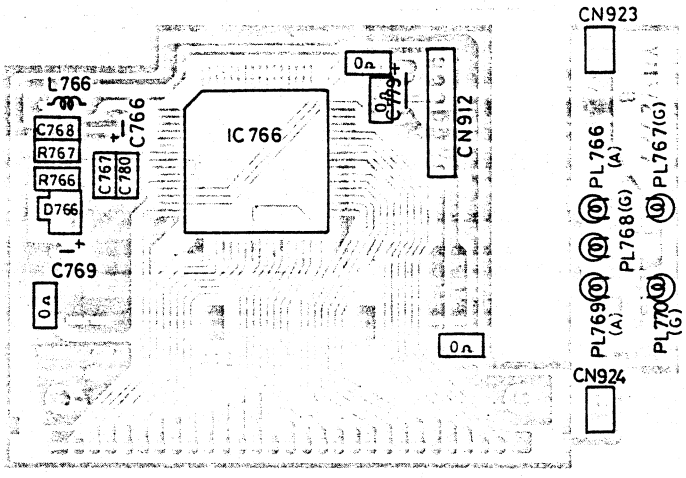


Fig. 7-7

■ LCD Board Parts List

⚠	REF. NO	PARTS NO.	PARTS NAME	DESCRIPTION
	CN912	VMC0063-007	CONNECTOR	
	CN923	VMZ0031-002	MINI PIN	
	CN924	VMZ0031-002	MINI PIN	
	C766	QERF1CM-106ZM	E.CAPACITOR	10MF 20% 16V
	C767	NCB21HK-103AY	C.CAPACITOR	
	C768	NCS21HJ-681AY	C CAPACITOR	
	C769	QERF1EM-475ZM	E CAPACITOR	4.7MF 20% 25V
	C780	NCB21HK-103AY	C.CAPACITOR	
	D766	MC2838X	DIODE	
	IC766	LC7582A	IC	
	L766	VQP0015-101Z	INDUCTOR	
	PL766	VGZ0001-019	LAMP	
	PL769	VGZ0001-019	LAMP	
	R766	NRSA02J-154NY	MG RESISTOR	
	R767	NRSA02J-473NY	MG REGISTOR	

■ Main P.C. Board

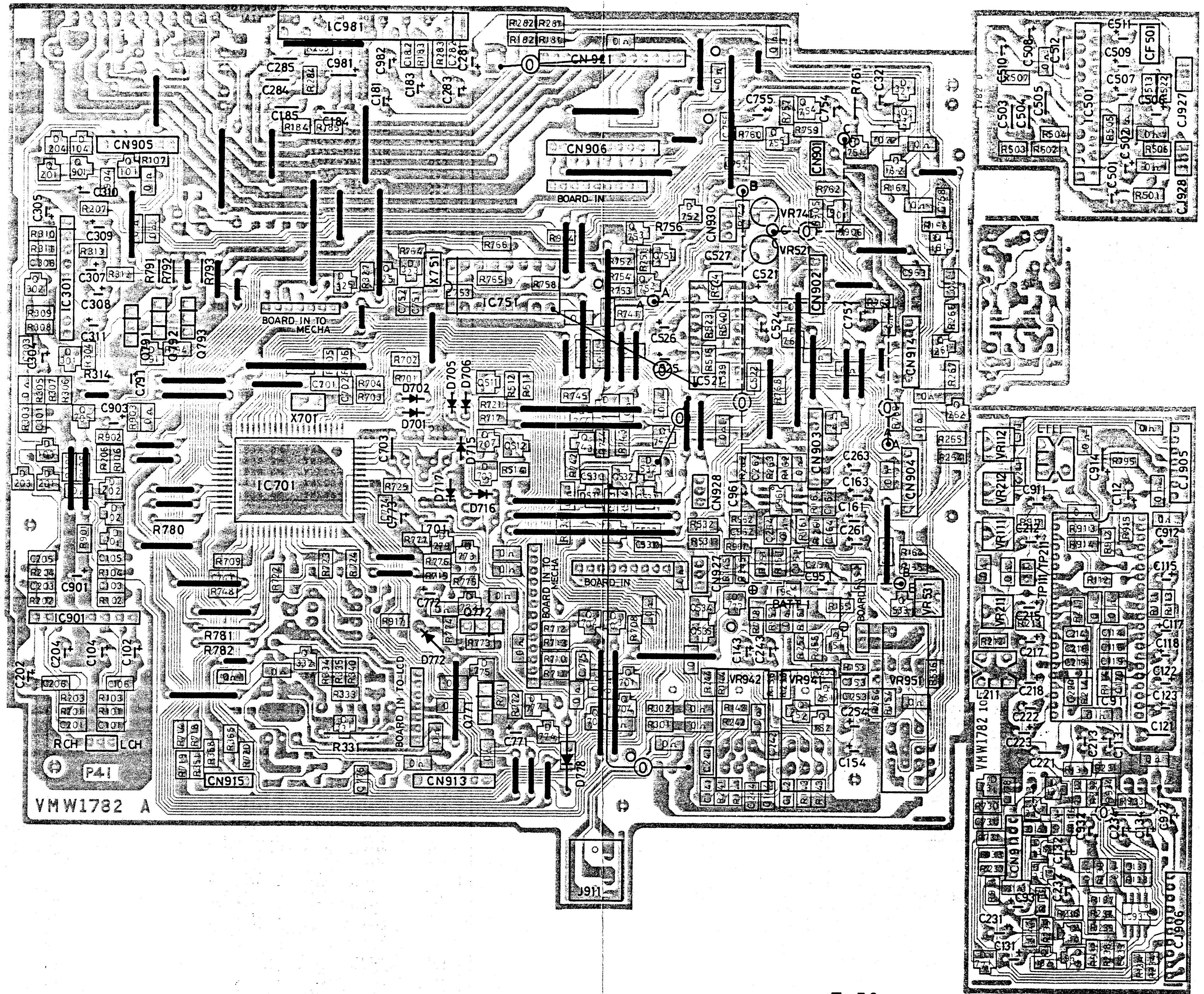

IC981
CN921
CN906
BOARD IN
CN905
IC301
BOARD IN TO MECHA
IC751
X751
IC521
VR741
VR521
CN930
CN901
CN902
CN914
IC701
X701
R780
IC901
RCH
LCH
P41
VMW1782 A
CN915
CN913
BOARD IN TO LCD
BOARD IN TO MECHA
BOARD IN
CN928
CN927
CN903
CN904
BATT
VR942
VR941
VR951
VR531
J911
IC501
CF501
CJ927
CJ928
VR112
VR212
VR111
VR211
CJ905
TP111/TP211
VMW1782 10
L211
CJ906

Fig. 7-8

■ FM Board

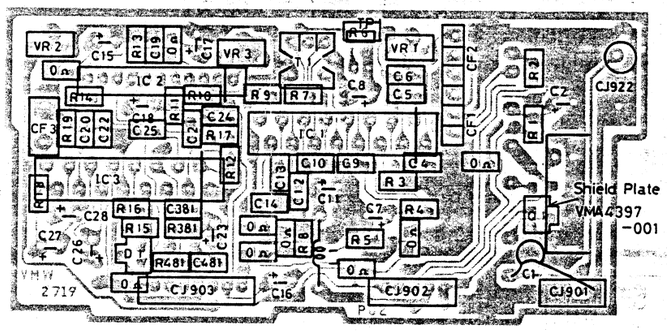


Fig. 7-9

■ AM Board

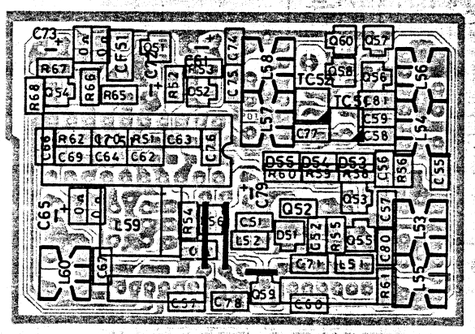


Fig. 7-10

■ FM Board Parts List

⚠	REF. NO	PARTS NO.	PARTS NAME
	CF1	VCF2S3B-102	C FILTER
	CF2	VCF2M3B-103	C FILTER
	CF3	CSB456F11	CELA LOCK
	CJ901	VMC0136-003	CONNECTOR
	CJ902	VMC0136-005	CONNECTOR
	CJ903	VMC0136-007	CONNECTOR
	CJ922	VMZ0075-001V	COAXIAL CONNECT
	C1	QCS11HJ-300	C.CAPACITOR
	C10	NCB21EK-223AY	C CAPACITOR
	C11	QEKF1AM-107ZM	E.CAPACITOR
	C12	NCB21EK-223AY	C CAPACITOR
	C13	NCB21EK-223AY	C CAPACITOR
	C14	NCS21HJ-330AY	C CAPACITOR
	C15	QEKF1HM-105ZM	E.CAPACITOR
	C16	QEKF1CM-106ZM	E.CAPACITOR
	C17	QEKF1CM-226ZM	E.CAPACITOR
	C18	QEKF1CM-106ZM	E.CAPACITOR
	C19	NCB21EK-223AY	C CAPACITOR
	C2	QEKF1HM-224ZM	E.CAPACITOR
	C20	NCB21HK-332AY	C.CAPACITOR
	C21	NCB21EK-473AY	C CAPACITOR
	C22	NCB21EK-333AY	C CAPACITOR
	C23	QEKF1AM-107ZM	E.CAPACITOR
	C24	NCS21HJ-471AY	C.CAPACITOR
	C25	NCB21HK-103AY	C.CAPACITOR
	C26	QEKF1HM-105ZM	E.CAPACITOR
	C27	QEKF1HM-105ZM	E.CAPACITOR
	C28	QEKF1HM-224ZM	E.CAPACITOR
	C381	NCB21EK-153AY	C.CAPACITOR
	C4	NCB21EK-223AY	C CAPACITOR
	C481	NCB21EK-153AY	C.CAPACITOR
	C5	NCB21EK-223AY	C CAPACITOR
	C6	NCB21EK-223AY	C CAPACITOR
	C7	QEKF1HM-474ZM	E.CAPACITOR
	C8	QEKF1HM-105ZM	E.CAPACITOR
	C9	NCS21HJ-101AY	C.CAPACITOR
	D1	DCC010-TB	SI DIODE
	IC1	LA1140B	IC
	IC2	NC3S300	IC
	IC3	LA3430	IC
	L1	VQP0008-101	INDUCTOR
	Q1	UN2213X	TRANSISTOR
	R1	NRSA02J-102NY	MG RESISTOR
	R10	NRSA02J-473NY	MG REGISTOR
	R11	NRSA02J-222NY	MG RESISTOR
	R12	NRSA02J-562NY	MG RESISTOR
	R13	NRSA02J-332NY	MG RESISTOR
	R14	NRSA02J-223NY	MG RESISTOR
	R15	NRSA02J-822NY	MG REAIATOR
	R16	NRSA02J-682NY	MG RESISTOR

⚠	REF. NO	PARTS NO.	PARTS NAME
	R17	NRSA02J-682NY	MG RESISTOR
	R18	NRSA02J-512NY	MG RESISTOR
	R19	NRSA02J-334NY	MG RESISTOR
	R2	NRSA02J-101NY	MG RESISTOR
	R3	NRSA02J-333NY	MG RESISTOR
	R381	NRSA02J-332NY	MG RESISTOR
	R4	NRSA02J-223NY	MG RESISTOR
	R481	NRSA02J-332NY	MG RESISTOR
	R5	NRSA02J-103NY	MG RESISTOR
	R6	NRSA02J-223NY	MG RESISTOR
	R7	NRSA02J-103NY	MG RESISTOR
	R8	NRSA02J-473NY	MG REGISTOR
	R9	NRSA02J-104NY	MG RESISTOR
	TP1	VMC0064-002	CONNECTOR
	TU1	VAF2S07-101	FM FRONTEND
	T1	VQT7F29-502	IFT
	VR1	QVPA603-331M	SEMI.V.RESISTOR
	VR2	QVPA603-223M	VOLUME REGISTOR
	VR3	QVPA603-103M	SEMI.V.RESISTOR

■ AM Board Parts List

⚠	REF. NO	PARTS NO.	PARTS NAME
	CF51	BFU450C4N	CERAMIC FILTER
	CJ904	VMC0136-006	CONNECTOR
	CJ914	VMC0136-006	CONNECTOR
	C51	NCB21EK-222AY	C CAPACITOR
	C52	NCB21EK-223AY	C CAPACITOR
	C55	NCB21EK-223AY	C CAPACITOR
	C56	NCB21EK-223AY	C CAPACITOR
	C57	NCS21HD-100AY	C CAPACITOR
	C58	NCB21EK-223AY	C CAPACITOR
	C59	NCS21HD-100AY	C CAPACITOR
	C60	NCB21EK-223AY	C CAPACITOR
	C61	QEKF1HM-105ZM	E.CAPACITOR
	C62	NCB21EK-223AY	C CAPACITOR
	C63	NCB21EK-223AY	C CAPACITOR
	C64	NCB21EK-473AY	C CAPACITOR
	C65	QEKF1CM-476ZM	E.CAPACITOR
	C66	NCB21EK-103AY	C CAPACITOR
	C67	NCF21HZ-683AY	C CAPACITOR
	C69	NCB21EK-103AY	C CAPACITOR
	C70	NCB21EK-103AY	C CAPACITOR
	C71	NCB21EK-473AY	C CAPACITOR
	C72	QEKF1HM-105ZM	E.CAPACITOR
	C73	QERF1CM-226ZM	E.CAPACITOR
	C74	NCB21EK-473AY	C CAPACITOR
	C75	NCT21CH-271AY	C CAPACITOR
	C76	NCB21EK-103AY	C CAPACITOR
	C77	NCT21CH-431AY	C CAPACITOR
	C78	NCB21EK-103AY	C CAPACITOR
	C79	QEKF1CM-226ZM	E.CAPACITOR
	C80	NCT21CH-120AY	C CAPACITOR
	C81	NCT21CH-120AY	C CAPACITOR
	D51	DCC010-TB	SI DIODE
	D52	MC2838X	DIODE
	D53	SVC321SP(B,D)3	VARI.CAP
	D54	SVC321SP(B,D)3	VARI.CAP
	D55	SVC321SP(B,D)3	VARI.CAP
	D56	HVM187STL	DIODE
	IC51	LA1135	IC
	L51	VQP1002-4R7Y	INDUCTOR
	L52	VQP1003-6R8Y	INDUCTOR
	L53	VQZ0031-001	MW RF
	L54	VQZ0031-101	MW RF
	L55	VQZ0056-001	LW RF
	L56	VQZ0056-001	LW RF
	L57	VQM7U01-501	OSC COIL(MW)
	L58	VQL7U01-501	OSC COIL(LW)
	L59	VQT7A21-105	IFT
	L60	VQT7A11-209	IFT
	Q51	2SD601A(RS)X	TRANSISTOR
	Q52	2SK427(T,U)	FET

⚠	REF. NO	PARTS NO.	PARTS NAME
	Q53	2SD601A(RS)X	TRANSISTOR
	Q54	2SB709(Q,R)X	TRANSISTOR
	Q55	UN2211X	TRANSISTOR
	Q56	UN2211X	TRANSISTOR
	Q57	UN2211X	TRANSISTOR
	Q58	UN2211X	TRANSISTOR
	Q59	UN2211X	TRANSISTOR
	Q60	UN2211X	TRANSISTOR
	R51	NRSA02J-103NY	MG RESISTOR
	R52	NRSA02J-472NY	MG RESISTOR
	R53	NRSA02J-332NY	MG RESISTOR
	R54	NRSA02J-102NY	MG RESISTOR
	R55	NRSA02J-104NY	MG RESISTOR
	R56	NRSA02J-102NY	MG RESISTOR
	R57	NRSA02J-102NY	MG RESISTOR
	R58	NRSA02J-104NY	MG RESISTOR
	R59	NRSA02J-104NY	MG RESISTOR
	R60	NRSA02J-104NY	MG RESISTOR
	R61	NRSA02J-330NY	MG RESISTOR
	R62	NRSA02J-332NY	MG RESISTOR
	R65	NRSA02J-820NY	MG RESISTOR
	R66	NRSA02J-223NY	MG RESISTOR
	R67	NRSA02J-102NY	MG RESISTOR
	R68	NRSA02J-223NY	MG RESISTOR
	TC51	QAT3720-200M	T.CAPACITOR
	TC52	QAT3720-600M	T.CAPACITOR

⚠	REF. NO	PARTS NO.	PARTS NAME	DESCRIPTION
	CF501	CSB456F11	CELA LOCK	
	CJ905	VMC0136-007	CONNECTOR	
	CJ906	VMC0136-010	CONNECTOR	
	CJ927	VMC0136-003	CONNECTOR	
	CJ928	VMC0136-003	CONNECTOR	
	CN901	VMC0135-003	CONNECTOR	
	CN902	VMC0135-005	CONNECTOR	
	CN903	VMC0135-007	CONNECTOR	
	CN904	VMC0135-006	CONNECTOR	
	CN905	VMC0135-007	CONNECTOR	
	CN906	VMC0135-010	CONNECTOR	
	CN911	VMC0064-006	CONNECTOR	
	CN914	VMC0135-006	CONNECTOR	
	CN921	VMC0135-013	CONNECTOR	
	CN927	VMC0135-003	CONNECTOR	
	CN928	VMC0135-003	CONNECTOR	
	CN930	VMC0135-003	CONNECTOR	
	C101	NCB21HK-681AY	C CAPACITOR	
	C102	QERF1HM-474ZM	E.CAPACITOR	.47MF 20% 50V
	C103	NCB21HK-103AY	C.CAPACITOR	
	C104	QERF1CM-226ZM	E.CAPACITOR	22MF 20% 16V
	C105	NCB21EK-393AY	C CAPACITOR	
	C106	NCS21HJ-121AY	C.CAPACITOR	
	C111	NCB21EK-682AY	C.CAPACITOR	
	C112	QERF1HM-474ZM	E.CAPACITOR	.47MF 20% 50V
	C113	QERF1EM-475ZM	E CAPACITOR	4.7MF 20% 25V
	C114	NCB21HK-103AY	C.CAPACITOR	
	C115	QERF1HM-105ZM	E.CAPACITOR	1.0MF 20% 50V
	C116	NCB21EK-183AY	C CAPACITOR	
	C117	QERF1HM-684ZM	E.CAPACITOR	.68MF 20% 50V
	C118	QERF1HM-225ZM	E CAPACITOR	2.2MF 20% 50V
	C119	NCB21EK-183AY	C CAPACITOR	
	C120	NCB21HK-103AY	C.CAPACITOR	
	C121	QFV11HJ-823ZM	TF CAPACITOR	.082MF 5% 50V
	C122	QERF1HM-684ZM	E.CAPACITOR	.68MF 20% 50V
	C123	QERF1HM-225ZM	E CAPACITOR	2.2MF 20% 50V
	C131	QERF1HM-105ZM	E.CAPACITOR	1.0MF 20% 50V
	C132	QERF1HM-225ZM	E CAPACITOR	2.2MF 20% 50V
	C133	NCS21HJ-121AY	C.CAPACITOR	
	C134	QERF1EM-475ZM	E CAPACITOR	4.7MF 20% 25V
	C141	NCB21EK-183AY	C CAPACITOR	
	C142	NCF21HZ-683AY	C CAPACITOR	
	C143	QERF1HM-474ZM	E.CAPACITOR	.47MF 20% 50V
	C144	QCY81EK-683Y	C CAPACITOR	.068MF 10% 25V
	C151	NCB21HK-272AY	C CAPACITOR	
	C153	NCB21HK-272AY	C CAPACITOR	
	C154	QERF1HM-224ZM	E.CAPACITOR	.22MF 20% 50V
	C161	QERF1HM-225ZM	E CAPACITOR	2.2MF 20% 50V
	C162	NCS21HJ-121AY	C.CAPACITOR	
	C163	QERF1CM-106ZM	E.CAPACITOR	10MF 20% 16V

⚠	REF. NO	PARTS NO.	PARTS NAME	DESCRIPTION
	C164	NCS21HJ-121AY	C.CAPACITOR	
	C181	QERF1EM-475ZM	E CAPACITOR	4.7MF 20% 25V
	C182	NCB21HK-102AY	C.CAPACITOR	
	C183	QERF1CM-476ZM	E.CAPACITOR	47MF 20% 16V
	C184	QFV71HJ-224ZM	TF CAPACITOR	.22MF 5% 50V
	C185	QFV71HJ-224ZM	TF CAPACITOR	.22MF 5% 50V
	C201	NCB21HK-681AY	C CAPACITOR	
	C202	QERF1HM-474ZM	E.CAPACITOR	.47MF 20% 50V
	C203	NCB21HK-103AY	C.CAPACITOR	
	C204	QERF1CM-226ZM	E.CAPACITOR	22MF 20% 16V
	C205	NCB21EK-393AY	C CAPACITOR	
	C206	NCS21HJ-121AY	C.CAPACITOR	
	C211	NCB21EK-682AY	C.CAPACITOR	
	C212	QERF1HM-474ZM	E.CAPACITOR	.47MF 20% 50V
	C213	QERF1EM-475ZM	E CAPACITOR	4.7MF 20% 25V
	C214	NCB21HK-103AY	C.CAPACITOR	
	C215	QERF1HM-105ZM	E.CAPACITOR	1.0MF 20% 50V
	C216	NCB21EK-183AY	C CAPACITOR	
	C217	QERF1HM-684ZM	E.CAPACITOR	.68MF 20% 50V
	C218	QERF1HM-225ZM	E CAPACITOR	2.2MF 20% 50V
	C219	NCB21EK-183AY	C CAPACITOR	
	C220	NCB21HK-103AY	C.CAPACITOR	
	C221	QFV11HJ-823ZM	TF CAPACITOR	.082MF 5% 50V
	C222	QERF1HM-684ZM	E.CAPACITOR	.68MF 20% 50V
	C223	QERF1HM-225ZM	E CAPACITOR	2.2MF 20% 50V
	C231	QERF1HM-105ZM	E.CAPACITOR	1.0MF 20% 50V
	C232	QERF1HM-225ZM	E CAPACITOR	2.2MF 20% 50V
	C233	NCS21HJ-121AY	C.CAPACITOR	
	C234	QERF1EM-475ZM	E CAPACITOR	4.7MF 20% 25V
	C241	NCB21EK-183AY	C CAPACITOR	
	C242	NCF21HZ-683AY	C CAPACITOR	
	C243	QERF1HM-474ZM	E.CAPACITOR	.47MF 20% 50V
	C244	QCY81EK-683Y	C CAPACITOR	.068MF 10% 25V
	C251	NCB21HK-272AY	C CAPACITOR	
	C253	NCB21HK-272AY	C CAPACITOR	
	C254	QERF1HM-224ZM	E.CAPACITOR	.22MF 20% 50V
	C261	QERF1HM-225ZM	E CAPACITOR	2.2MF 20% 50V
	C262	NCS21HJ-121AY	C.CAPACITOR	
	C263	QERF1CM-106ZM	E.CAPACITOR	10MF 20% 16V
	C264	NCS21HJ-121AY	C.CAPACITOR	
	C281	QERF1EM-475ZM	E CAPACITOR	4.7MF 20% 25V
	C282	NCB21HK-102AY	C.CAPACITOR	
	C283	QERF1CM-476ZM	E.CAPACITOR	47MF 20% 16V
	C284	QFV71HJ-224ZM	TF CAPACITOR	.22MF 5% 50V
	C285	QFV71HJ-224ZM	TF CAPACITOR	.22MF 5% 50V
	C301	NCB21HK-472AY	C.CAPACITOR	
	C303	NCB21HK-272AY	C CAPACITOR	
	C304	QERF1HM-335ZM	E CAPACITOR	3.3MF 20% 50V
	C305	QERF1HM-104ZM	E CAPACITOR	.10MF 20% 50V
	C306	NCB21HK-472AY	C.CAPACITOR	

⚠	REF. NO	PARTS NO.	PARTS NAME	DESCRIPTION
	C307	QERF1HM-224ZM	E.CAPACITOR	.22MF 20% 50V
	C308	QERF1HM-335ZM	E CAPACITOR	3.3MF 20% 50V
	C309	QERF1CM-476ZM	E.CAPACITOR	47MF 20% 16V
	C310	QERF1CM-476ZM	E.CAPACITOR	47MF 20% 16V
	C311	QERF1CM-476ZM	E.CAPACITOR	47MF 20% 16V
	C321	QERF1EM-475ZM	E CAPACITOR	4.7MF 20% 25V
	C501	QERF1CM-476ZM	E.CAPACITOR	47MF 20% 16V
	C502	QERF1CM-106ZM	E.CAPACITOR	10MF 20% 16V
	C503	QFN31HJ-102Z	M.CAPACITOR	1000PF 5% 50V
	C504	QFN31HJ-102Z	M.CAPACITOR	1000PF 5% 50V
	C505	QFN31HJ-222Z	M CAPACITOR	2200PF 5% 50V
	C506	QERF1HM-224ZM	E.CAPACITOR	.22MF 20% 50V
	C507	QERF1HM-474ZM	E.CAPACITOR	.47MF 20% 50V
	C508	QERF1HM-474ZM	E.CAPACITOR	.47MF 20% 50V
	C509	QERF1HM-334ZM	E CAPACITOR	.33MF 20% 50V
	C510	QERF1CM-106ZM	E.CAPACITOR	10MF 20% 16V
	C511	QERF1CM-106ZM	E.CAPACITOR	10MF 20% 16V
	C512	QFV71HJ-683ZM	TF.CAPACITOR	.068MF 5% 50V
	C513	NCF21HZ-104AY	C CAPACITOR	
	C521	QERF1CM-476ZM	E.CAPACITOR	47MF 20% 16V
	C522	NCB21EK-393AY	C CAPACITOR	
	C524	QERF1EM-475ZM	E CAPACITOR	4.7MF 20% 25V
	C525	QERFOJM-107ZM	E.CAPACITOR	100MF 20% 6.3V
	C526	QERF1CM-476ZM	E.CAPACITOR	47MF 20% 16V
	C527	QFV11HJ-823ZM	TF CAPACITOR	.082MF 5% 50V
	C531	NCB21HK-472AY	C.CAPACITOR	
	C532	NCB21HK-472AY	C.CAPACITOR	
	C533	NCB21EK-393AY	C CAPACITOR	
	C701	NCT21CH-220AY	C CAPACITOR	
	C702	NCT21CH-220AY	C CAPACITOR	
	C703	QCC11EM-473V	C.CAPACITOR	.047MF 20% 25V
	C731	NCF21HZ-683AY	C CAPACITOR	
	C741	NCB21HK-103AY	C.CAPACITOR	
	C751	NCT21CH-220AY	C CAPACITOR	
	C752	NCT21CH-220AY	C CAPACITOR	
	C753	NCB21HK-103AY	C.CAPACITOR	
	C754	QERF1CM-476ZM	E.CAPACITOR	47MF 20% 16V
	C755	QEB41EM-225	LLC E.CAPACITOR	2.2MF 20% 25V
	C756	NCB21HK-102AY	C.CAPACITOR	
	C757	QERF1HM-225ZM	E CAPACITOR	2.2MF 20% 50V
	C758	NCB21HK-472AY	C.CAPACITOR	
	C771	QERF1CM-476ZM	E.CAPACITOR	47MF 20% 16V
	C772	QERF1CM-476ZM	E.CAPACITOR	47MF 20% 16V
	C773	QERFOJM-107ZM	E.CAPACITOR	100MF 20% 6.3V
	C774	NCB21EK-393AY	C CAPACITOR	
	C775	NCF21HZ-104AY	C CAPACITOR	
	C776	QCY81EK-823Y	C CAPACITOR	.082MF 10% 25V
	C778	NCF21HZ-104AY	C CAPACITOR	
	C791	QERF1CM-476ZM	E.CAPACITOR	47MF 20% 16V
	C901	QERF1CM-107ZM	E CAPACITOR	100MF 20% 16V

⚠	REF. NO	PARTS NO.	PARTS NAME	DESCRIPTION
	C903	QERF1HM-105ZM	E.CAPACITOR	1.0MF 20% 50V
	C904	NCB21EK-153AY	C.CAPACITOR	
	C911	QERF1CM-476ZM	E.CAPACITOR	47MF 20% 16V
	C912	QERF1CM-226ZM	E.CAPACITOR	22MF 20% 16V
	C914	QETC1AM-477ZN	E.CAPACITOR	470MF 20% 10V
	C931	QERF1CM-226ZM	E.CAPACITOR	22MF 20% 16V
	C932	QERF1CM-476ZM	E.CAPACITOR	47MF 20% 16V
	C951	QERF1EM-475ZM	E CAPACITOR	4.7MF 20% 25V
	C961	QEKFOJM-227ZM	E CAPACITOR	220MF 20% 6.3V
	C962	NCF21HZ-104AY	C CAPACITOR	
	C963	NCF21HZ-104AY	C CAPACITOR	
	C981	QETA1CM-477VM	E.CAPACITOR	470MF 20% 16V
	C982	QEKF1AM-107ZM	E.CAPACITOR	100MF 20% 10V
	D101	MC2838X	DIODE	
	D102	MC2838X	DIODE	
	D103	MC2838X	DIODE	
	D104	MC2838X	DIODE	
	D131	MC2838X	DIODE	
	D201	MC2838X	DIODE	
	D202	MC2838X	DIODE	
	D203	MC2838X	DIODE	
	D204	MC2838X	DIODE	
	D231	MC2838X	DIODE	
	D321	MA3110(M)X	Z DIODE	
	D323	MC2838X	DIODE	
	D325	MA3051(M)TX	Z DIODE	
	D531	MC2836X	DIODE	
	D532	MC2838X	DIODE	
	D533	MC2838X	DIODE	
	D701	MA165-TA5V	SI.DIODE	
	D702	MA165-TA5V	SI.DIODE	
	D703	MC2838X	DIODE	
	D705	MA165-TA5V	SI.DIODE	
	D706	MA165-TA5V	SI.DIODE	
	D715	MA165-TA5V	SI.DIODE	
	D716	MA165-TA5V	SI.DIODE	
	D717	MA165-TA5V	SI.DIODE	
	D731	MA3051(M)TX	Z DIODE	
	D741	MC2838X	DIODE	
	D751	MA3100(L)X	ZENER DIODE	
	D752	MC2838X	DIODE	
	D761	MC2838X	DIODE	
	D771	MC2838X	DIODE	
	D772	11ES2	SI.DIODE	
	D773	MA3056(M)TX	ZENER DIODE	
	D774	MA3062(M)TW	DIODE	
	D775	MC2838X	DIODE	
	D776	MA704W	S K DIODE	
	D777	MC2838X	DIODE	
	D778	MA165	SI DIODE	

⚠	REF. NO	PARTS NO.	PARTS NAME	DESCRIPTION
	D779	MC2838X	DIODE	
	D791	MA3100(L)X	ZENER DIODE	
	D901	MA3056(M)TX	ZENER DIODE	
	IC301	LA2000S	I C	
	IC501	LA2220	I C	
	IC521	AN7410N	IC	
	IC701	UPD75108G-E47	IC	
	IC751	LM7001	IC	
	IC901	UPC1228HA	IC	
	IC911	HA12088ANT	DOLBY NR I.C	
	IC931	AN6556S-T1	IC	
	IC961	AN6558S-T1	MINI FLAT IC	
	IC981	TA8205AH	IC	
	J911	VMJ4022-001	JACK	
	L111	VQZ0013-002	SKEWING COIL	
	L211	VQZ0013-002	SKEWING COIL	
	L701	VQP0018-470	INDUCTOR	
	Q101	UN2213X	TRANSISTOR	
	Q131	UN2213X	TRANSISTOR	
	Q132	UN2213X	TRANSISTOR	
	Q151	2SK303V4-TB	TRANSISTOR	
	Q152	2SD601A(RS)X	TRANSISTOR	
	Q161	2SD1048X-6TB	TRANSISTOR	
	Q162	2SD1048X-6TB	TRANSISTOR	
	Q201	UN2213X	TRANSISTOR	
	Q231	UN2213X	TRANSISTOR	
	Q232	UN2213X	TRANSISTOR	
	Q251	2SK303V4-TB	TRANSISTOR	
	Q252	2SD601A(RS)X	TRANSISTOR	
	Q261	2SD1048X-6TB	TRANSISTOR	
	Q262	2SD1048X-6TB	TRANSISTOR	
	Q301	2SD601A(RS)X	TRANSISTOR	
	Q302	2SK303V4-TB	TRANSISTOR	
	Q321	UN2113X	TRANSISTOR	
	Q325	UN2113X	TRANSISTOR	
	Q331	2SB815B7-T-TB	TRANSISTOR	
	Q332	UN2213X	TRANSISTOR	
	Q511	2SA1179(M6M7)TB	TRANSISTOR	
	Q512	2SA1179(M6M7)TB	TRANSISTOR	
	Q531	UN2113X	TRANSISTOR	
	Q532	UN2213X	TRANSISTOR	
	Q533	2SD1048X-6TB	TRANSISTOR	
	Q534	UN2213X	TRANSISTOR	
	Q535	UN2213X	TRANSISTOR	
	Q701	UN2213X	TRANSISTOR	
	Q702	2SD601A(RS)X	TRANSISTOR	
	Q703	2SD601A(RS)X	TRANSISTOR	
	Q704	UN2113X	TRANSISTOR	
	Q705	UN2113X	TRANSISTOR	
	Q706	UN2113X	TRANSISTOR	

⚠	REF. NO	PARTS NO.	PARTS NAME	DESCRIPTION
	Q707	2SA1179(M6M7)TB	TRANSISTOR	
	Q741	UN2213X	TRANSISTOR	
	Q742	2SD601A(RS)X	TRANSISTOR	
	Q743	2SD601A(RS)X	TRANSISTOR	
	Q744	2SD601A(RS)X	TRANSISTOR	
	Q751	2SA1179(M6M7)TB	TRANSISTOR	
	Q752	2SB815B7-T-TB	TRANSISTOR	
	Q753	2SA1179(M6M7)TB	TRANSISTOR	
	Q754	2SD601A(RS)X	TRANSISTOR	
	Q755	2SD601A(RS)X	TRANSISTOR	
	Q757	UN2113X	TRANSISTOR	
	Q771	2SD1994(R/S)TA	TRANRISTOR	
	Q772	2SD1994(R/S)TA	TRANRISTOR	
	Q773	2SA1179(M6M7)TB	TRANSISTOR	
	Q791	2SD1994(R/S)TA	TRANRISTOR	
	Q792	2SD1994(R/S)TA	TRANRISTOR	
	Q793	2SD1994(R/S)TA	TRANRISTOR	
	Q901	UN2213X	TRANSISTOR	
	Q931	UN2213X	TRANSISTOR	
	Q951	UN2213X	TRANSISTOR	
	R101	NRSA02J-334NY	MG RESISTOR	
	R102	NRSA02J-153NY	MG RESISTOR	
	R103	NRSA02J-121NY	CARBON RESISTOR	
	R104	NRSA02J-152NY	MG RESISTOR	
	R105	NRSA02J-152NY	MG RESISTOR	
	R106	NRSA02J-103NY	MG RESISTOR	
	R107	NRSA02J-333NY	MG RESISTOR	
	R111	NRSA02J-102NY	MG RESISTOR	
	R112	NRSA02J-271NY	MG RESISTOR	
	R113	NRSA02J-683NY	MG RESISTOR	
	R114	NRSA02J-101NY	MG RESISTOR	
	R131	NRSA02J-393NY	MG RESISTOR	
	R132	NRSA02J-682NY	MG RESISTOR	
	R133	NRSA02J-103NY	MG RESISTOR	
	R134	NRSA02J-103NY	MG RESISTOR	
	R135	NRSA02J-153NY	MG RESISTOR	
	R136	NRSA02J-473NY	MG REGISTOR	
	R137	NRSA02J-104NY	MG RESISTOR	
	R138	NRSA02J-102NY	MG RESISTOR	
	R139	NRSA02J-102NY	MG RESISTOR	
	R141	NRSA02J-472NY	MG RESISTOR	
	R142	NRSA02J-681NY	MG RESISTOR	
	R143	NRSA02J-681NY	MG RESISTOR	
	R144	NRSA02J-332NY	MG RESISTOR	
	R145	NRS181J-332NY	MG RESISTOR	
	R151	NRS181J-334NY	MG RESISTOR	
	R152	NRSA02J-223NY	MG RESISTOR	
	R153	NRSA02J-334NY	MG RESISTOR	
	R154	NRSA02J-272NY	MG RESISTOR	
	R155	NRSA02J-104NY	MG RESISTOR	

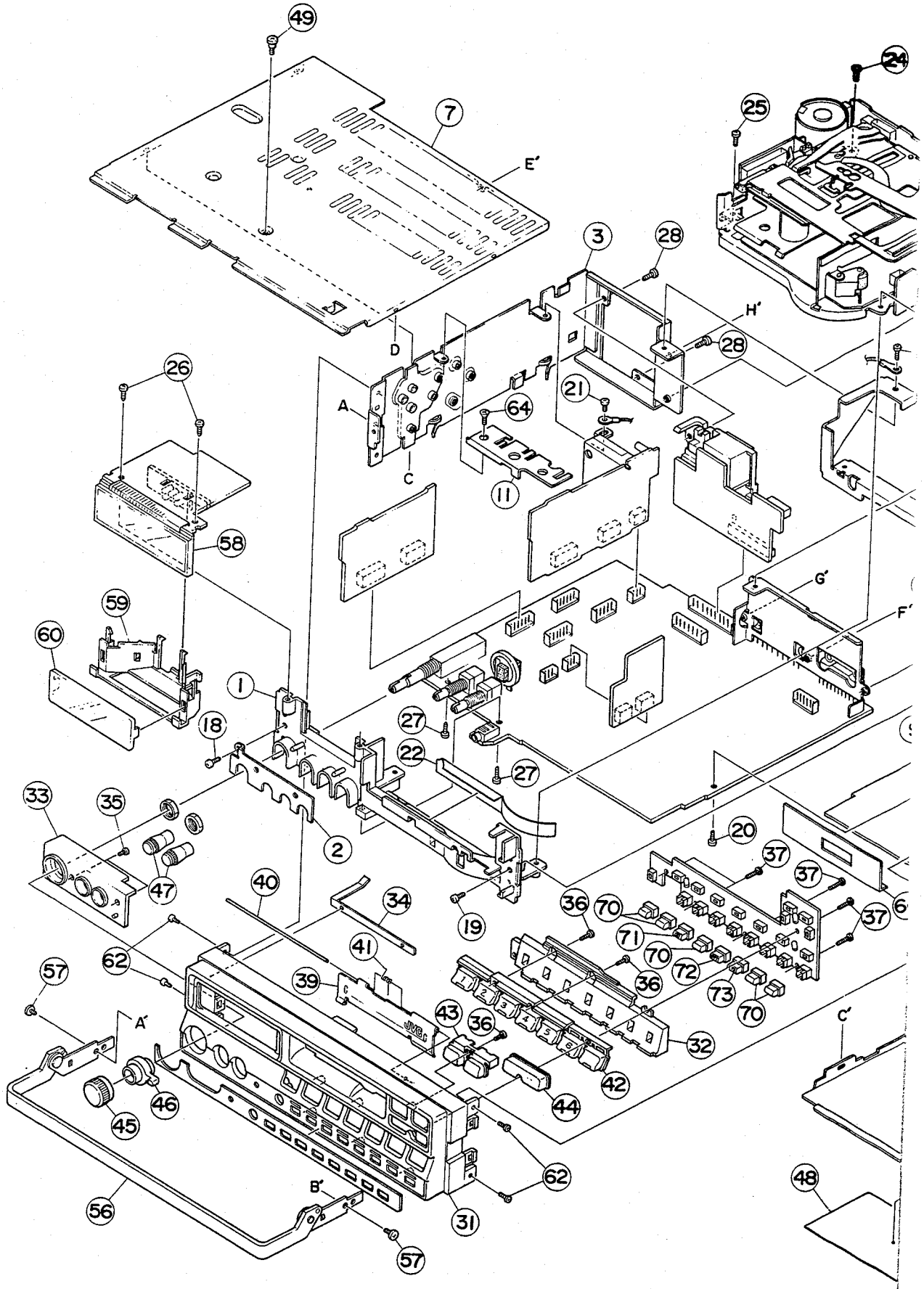
⚠	REF. NO	PARTS NO.	PARTS NAME	DESCRIPTION
	R156	NRSA02J-103NY	MG RESISTOR	
	R161	NRSA02J-104NY	MG RESISTOR	
	R162	NRSA02J-102NY	MG RESISTOR	
	R163	NRSA02J-153NY	MG RESISTOR	
	R164	NRSA02J-102NY	MG RESISTOR	
	R165	NRSA02J-102NY	MG RESISTOR	
	R166	NRSA02J-332NY	MG RESISTOR	
	R167	NRSA02J-332NY	MG RESISTOR	
	R181	NRSA02J-103NY	MG RESISTOR	
	R182	NRSA02J-562NY	MG RESISTOR	
	R183	NRSA02J-471NY	MG RESISTOR	
	R184	NRSA02K-2R2NY	MF RESISTOR	
	R185	NRSA02K-2R2NY	MF RESISTOR	
	R201	NRSA02J-334NY	MG RESISTOR	
	R202	NRSA02J-153NY	MG RESISTOR	
	R203	NRSA02J-121NY	CARBON RESISTOR	
	R204	NRSA02J-152NY	MG RESISTOR	
	R205	NRSA02J-152NY	MG RESISTOR	
	R206	NRSA02J-103NY	MG RESISTOR	
	R207	NRSA02J-333NY	MG RESISTOR	
	R211	NRSA02J-102NY	MG RESISTOR	
	R212	NRSA02J-271NY	MG RESISTOR	
	R213	NRSA02J-683NY	MG RESISTOR	
	R214	NRSA02J-101NY	MG RESISTOR	
	R231	NRSA02J-393NY	MG RESISTOR	
	R232	NRSA02J-682NY	MG RESISTOR	
	R233	NRSA02J-103NY	MG RESISTOR	
	R234	NRSA02J-103NY	MG RESISTOR	
	R235	NRSA02J-153NY	MG RESISTOR	
	R236	NRSA02J-473NY	MG REGISTOR	
	R237	NRSA02J-104NY	MG RESISTOR	
	R238	NRSA02J-102NY	MG RESISTOR	
	R239	NRSA02J-102NY	MG RESISTOR	
	R241	NRSA02J-472NY	MG RESISTOR	
	R242	NRSA02J-681NY	MG RESISTOR	
	R243	NRSA02J-681NY	MG RESISTOR	
	R244	NRSA02J-332NY	MG RESISTOR	
	R245	NRS181J-332NY	MG RESISTOR	
	R251	NRS181J-334NY	MG RESISTOR	
	R252	NRSA02J-223NY	MG RESISTOR	
	R253	NRSA02J-334NY	MG RESISTOR	
	R254	NRSA02J-272NY	MG RESISTOR	
	R255	NRSA02J-104NY	MG RESISTOR	
	R256	NRSA02J-103NY	MG RESISTOR	
	R261	NRSA02J-104NY	MG RESISTOR	
	R262	NRSA02J-102NY	MG RESISTOR	
	R263	NRSA02J-153NY	MG RESISTOR	
	R264	NRS181J-102NY	MG RESISTOR	
	R265	NRS181J-102NY	MG RESISTOR	
	R266	NRSA02J-332NY	MG RESISTOR	

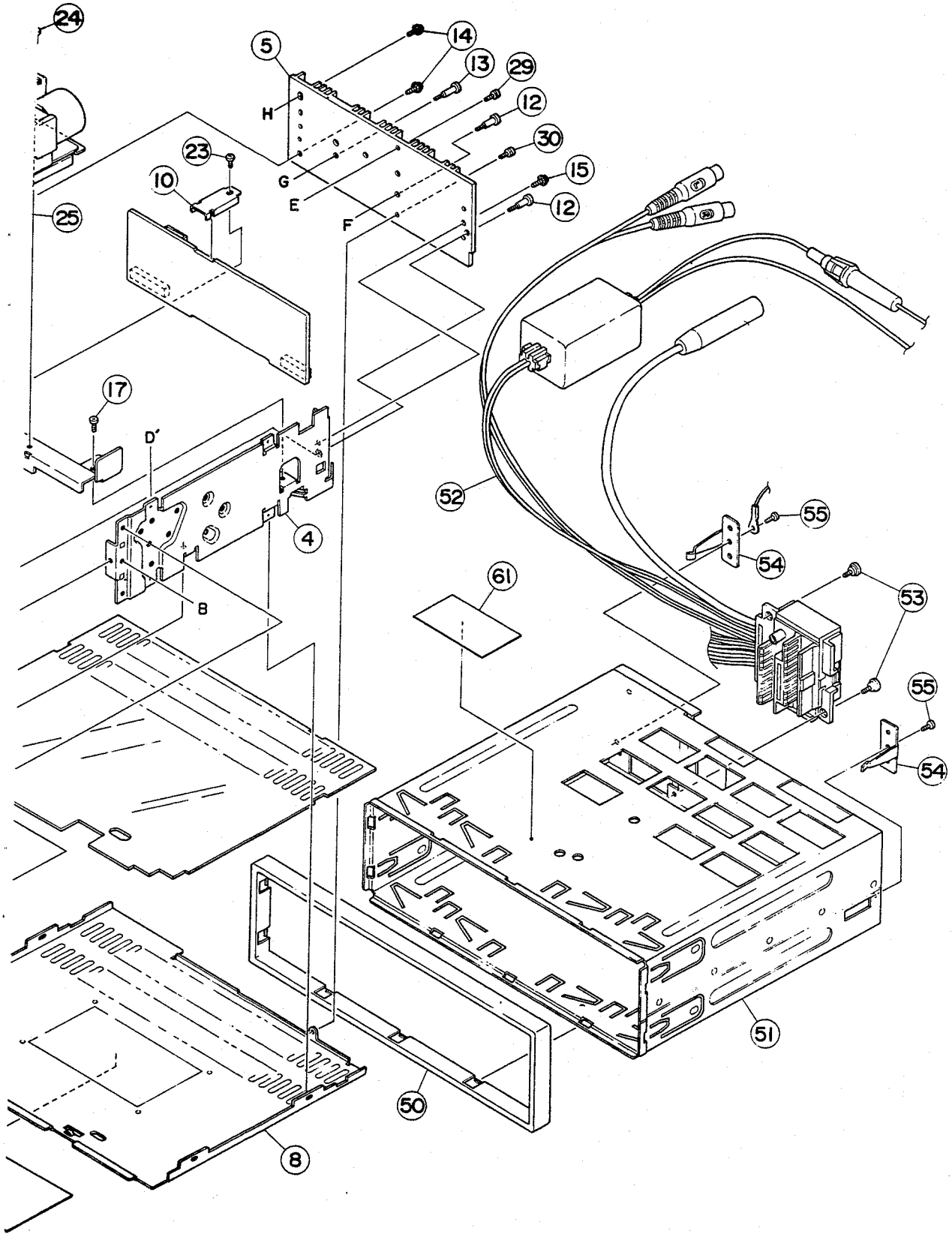
⚠	REF. NO	PARTS NO.	PARTS NAME	DESCRIPTION
	R267	NRSA02J-332NY	MG RESISTOR	
	R281	NRSA02J-103NY	MG RESISTOR	
	R282	NRSA02J-562NY	MG RESISTOR	
	R283	NRSA02J-471NY	MG RESISTOR	
	R284	NRSA02K-2R2NY	MF RESISTOR	
	R285	NRSA02K-2R2NY	MF RESISTOR	
	R301	NRS181J-273NY	MG RESISTOR	
	R302	NRS181J-273NY	MG RESISTOR	
	R303	NRSA02J-103NY	MG RESISTOR	
	R304	NRSA02J-103NY	MG RESISTOR	
	R305	NRSA02J-102NY	MG RESISTOR	
	R306	NRSA02J-334NY	MG RESISTOR	
	R307	NRSA02J-103NY	MG RESISTOR	
	R308	NRSA02J-334NY	MG RESISTOR	
	R309	NRSA02J-472NY	MG RESISTOR	
	R310	NRSA02J-223NY	MG RESISTOR	
	R311	NRSA02J-103NY	MG RESISTOR	
	R312	NRSA02J-102NY	MG RESISTOR	
	R313	NRSA02J-334NY	MG RESISTOR	
	R314	QRD161J-470Y	CARBON RESISTOR	47 5% 1/6W
	R327	NRSA02J-182NY	MG RESISTOR	
	R331	QRG016J-220A	OMF RESISTOR	22 5% 1/1W
	R333	NRSA02J-103NY	MG RESISTOR	
	R334	NRSA02J-272NY	MG RESISTOR	
	R335	NRSA02J-272NY	MG RESISTOR	
	R340	NRSA02J-272NY	MG RESISTOR	
	R351	NRSA02J-471NY	MG RESISTOR	
	R358	NRSA02J-471NY	MG RESISTOR	
	R365	NRSA02J-471NY	MG RESISTOR	
	R501	NRS181J-2R2NY	MG RESISTOR	
	R502	NRSA02J-182NY	MG RESISTOR	
	R503	NRSA02J-161NY	MG RESISTOR	
	R504	NRSA02J-473NY	MG REGISTOR	
	R505	NRSA02J-332NY	MG RESISTOR	
	R506	NRSA02J-472NY	MG RESISTOR	
	R507	NRSA02J-473NY	MG REGISTOR	
	R511	NRSA02J-332NY	MG RESISTOR	
	R512	NRSA02J-473NY	MG REGISTOR	
	R514	NRSA02J-473NY	MG REGISTOR	
	R515	NRSA02J-272NY	MG RESISTOR	
	R522	NRSA02J-682NY	MG RESISTOR	
	R523	NRSA02J-473NY	MG REGISTOR	
	R524	NRSA02J-223NY	MG RESISTOR	
	R531	NRS181J-334NY	MG RESISTOR	
	R532	NRS181J-334NY	MG RESISTOR	
	R533	NRSA02J-103NY	MG RESISTOR	
	R534	NRSA02J-103NY	MG RESISTOR	
	R535	NRS181J-102NY	MG RESISTOR	
	R536	NRSA02J-332NY	MG RESISTOR	
	R537	NRSA02J-332NY	MG RESISTOR	

⚠	REF. NO	PARTS NO.	PARTS NAME	DESCRIPTION
	R539	NRSA02J-224NY	MG RESISTOR	
	R540	NRSA02J-330NY	MG RESISTOR	
	R701	NRS181J-473NY	MG RESISTOR	
	R702	NRS181J-473NY	MG RESISTOR	
	R703	NRSA02J-473NY	MG REGISTOR	
	R704	NRSA02J-473NY	MG REGISTOR	
	R705	NRSA02J-473NY	MG REGISTOR	
	R706	NRSA02J-473NY	MG REGISTOR	
	R708	NRSA02J-473NY	MG REGISTOR	
	R709	NRS181J-473NY	MG RESISTOR	
	R710	NRSA02J-223NY	MG RESISTOR	
	R711	NRSA02J-223NY	MG RESISTOR	
	R712	NRSA02J-473NY	MG REGISTOR	
	R713	NRSA02J-473NY	MG REGISTOR	
	R714	NRSA02J-473NY	MG REGISTOR	
	R715	NRSA02J-473NY	MG REGISTOR	
	R717	NRSA02J-473NY	MG REGISTOR	
	R718	NRSA02J-472NY	MG RESISTOR	
	R719	NRSA02J-472NY	MG RESISTOR	
	R720	NRSA02J-472NY	MG RESISTOR	
	R721	NRSA02J-332NY	MG RESISTOR	
	R722	NRS181J-332NY	MG RESISTOR	
	R723	NRSA02J-332NY	MG RESISTOR	
	R724	NRSA02J-332NY	MG RESISTOR	
	R725	NRSA02J-473NY	MG REGISTOR	
	R726	NRS181J-473NY	MG RESISTOR	
	R730	NRSA02J-473NY	MG REGISTOR	
	R731	NRSA02J-103NY	MG RESISTOR	
	R741	NRSA02J-473NY	MG REGISTOR	
	R742	NRSA02J-473NY	MG REGISTOR	
	R743	NRS181J-273NY	MG RESISTOR	
	R744	NRSA02J-223NY	MG RESISTOR	
	R745	NRSA02J-473NY	MG REGISTOR	
	R747	NRSA02J-103NY	MG RESISTOR	
	R748	NRSA02J-104NY	MG RESISTOR	
	R751	NRSA02J-103NY	MG RESISTOR	
	R752	NRSA02J-332NY	MG RESISTOR	
	R753	NRSA02J-103NY	MG RESISTOR	
	R754	NRSA02J-332NY	MG RESISTOR	
	R756	QRD161J-472Y	CARBON RESISTOR	4.7K 5% 1/6W
	R757	NRSA02J-471NY	MG RESISTOR	
	R758	NRSA02J-152NY	MG RESISTOR	
	R759	NRSA02J-103NY	MG RESISTOR	
	R760	NRSA02J-103NY	MG RESISTOR	
	R761	QRD161J-331Y	CARBON RESISTOE	330 5% 1/6W
	R762	NRSA02J-332NY	MG RESISTOR	
	R763	NRSA02J-471NY	MG RESISTOR	
	R764	NRSA02J-332NY	MG RESISTOR	
	R765	NRSA02J-332NY	MG RESISTOR	
	R766	NRSA02J-332NY	MG RESISTOR	

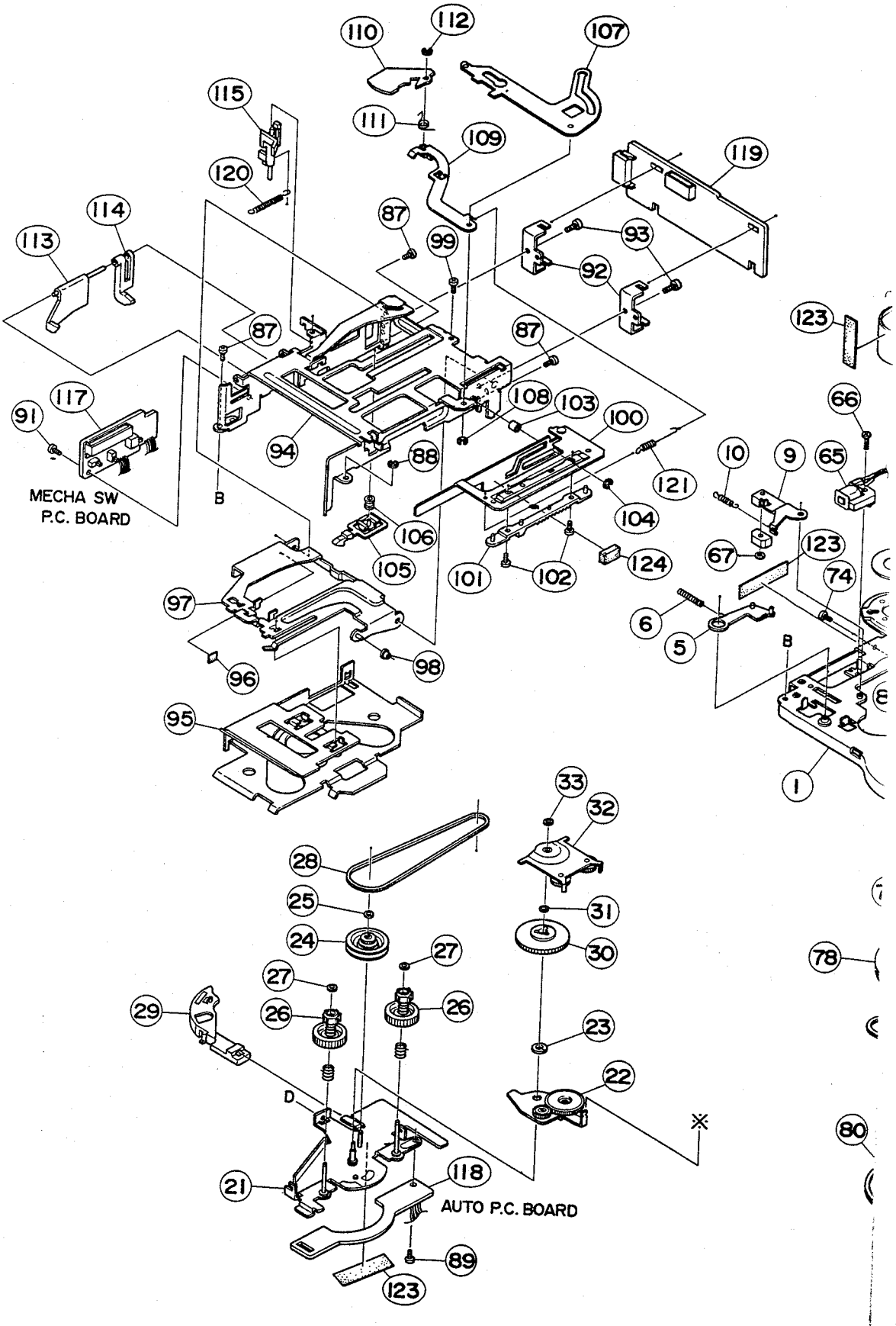
⚠	REF. NO	PARTS NO.	PARTS NAME	DESCRIPTION
	R768	NRS181J-332NY	MG RESISTOR	
	R769	NRSA02J-102NY	MG RESISTOR	
	R771	NRSA02J-330NY	MG RESISTOR	
	R772	NRSA02J-102NY	MG RESISTOR	
	R773	NRSA02J-101NY	MG RESISTOR	
	R774	NRSA02J-182NY	MG RESISTOR	
	R775	NRSA02J-103NY	MG RESISTOR	
	R776	NRSA02J-182NY	MG RESISTOR	
	R777	NRSA02J-103NY	MG RESISTOR	
	R778	NRSA02J-102NY	MG RESISTOR	
	R780	QRD161J-473	CARBON RESISTOR	47K 5% 1/6W
	R781	QRD161J-473	CARBON RESISTOR	47K 5% 1/6W
	R782	QRD161J-473	CARBON RESISTOR	47K 5% 1/6W
	R791	QRD161J-1ROY	CARBON RESISTOR	1.0 5% 1/6W
	R792	QRD161J-1ROY	CARBON RESISTOR	1.0 5% 1/6W
	R793	QRD161J-1ROY	CARBON RESISTOR	1.0 5% 1/6W
	R794	NRSA02J-102NY	MG RESISTOR	
	R795	NRSA02J-330NY	MG RESISTOR	
	R901	NRSA02J-101NY	MG RESISTOR	
	R902	NRSA02J-103NY	MG RESISTOR	
	R903	NRSA02J-103NY	MG RESISTOR	
	R904	NRSA02J-273NY	MG RESISTOR	
	R905	NRS181J-102NY	MG RESISTOR	
	R906	NRSA02J-273NY	MG RESISTOR	
	R911	NRSA02J-203NY	MG REGISTOR	
	R912	NRSA02J-103NY	MG RESISTOR	
	R913	NRS181J-682NY	MG RESISTOR	
	R914	NRS181J-102NY	MG RESISTOR	
	R915	NRSA02J-102NY	MG RESISTOR	
	R917	NRSA02J-562NY	MG RESISTOR	
	R931	NRSA02J-472NY	MG RESISTOR	
	R932	NRSA02J-223NY	MG RESISTOR	
	R933	NRSA02J-562NY	MG RESISTOR	
	R934	NRSA02J-562NY	MG RESISTOR	
	R951	NRSA02J-103NY	MG RESISTOR	
	R953	NRSA02J-103NY	MG RESISTOR	
	R961	NRSA02J-682NY	MG RESISTOR	
	R962	NRSA02J-472NY	MG RESISTOR	
	TP111	QMV5004-002	CONNECTOR	
	TP211	QMV5004-002	CONNECTOR	
	VR111	QVPA603-223M	VOLUME REGISTOR	
	VR112	QVPA603-153M	SEMI V RESISTOR	
	VR211	QVPA603-223M	VOLUME REGISTOR	
	VR212	QVPA603-153M	SEMI V RESISTOR	
	VR521	VCV5014-682	V RESISTOR	
	VR531	QVPA603-222M	SEMI.V.RESISTOR	
	VR741	VCV5012-223	SEMI V RESISTOR	
	VR941	VCV1001-082	VOLUME	
	VR942	VCV1001-082	VOLUME	
	VR951	VCV1001-077	VOLUME	
	X701	VCX5024-001	CRYSTAL	
	X751	VCX5025-001	CRYSTAL	

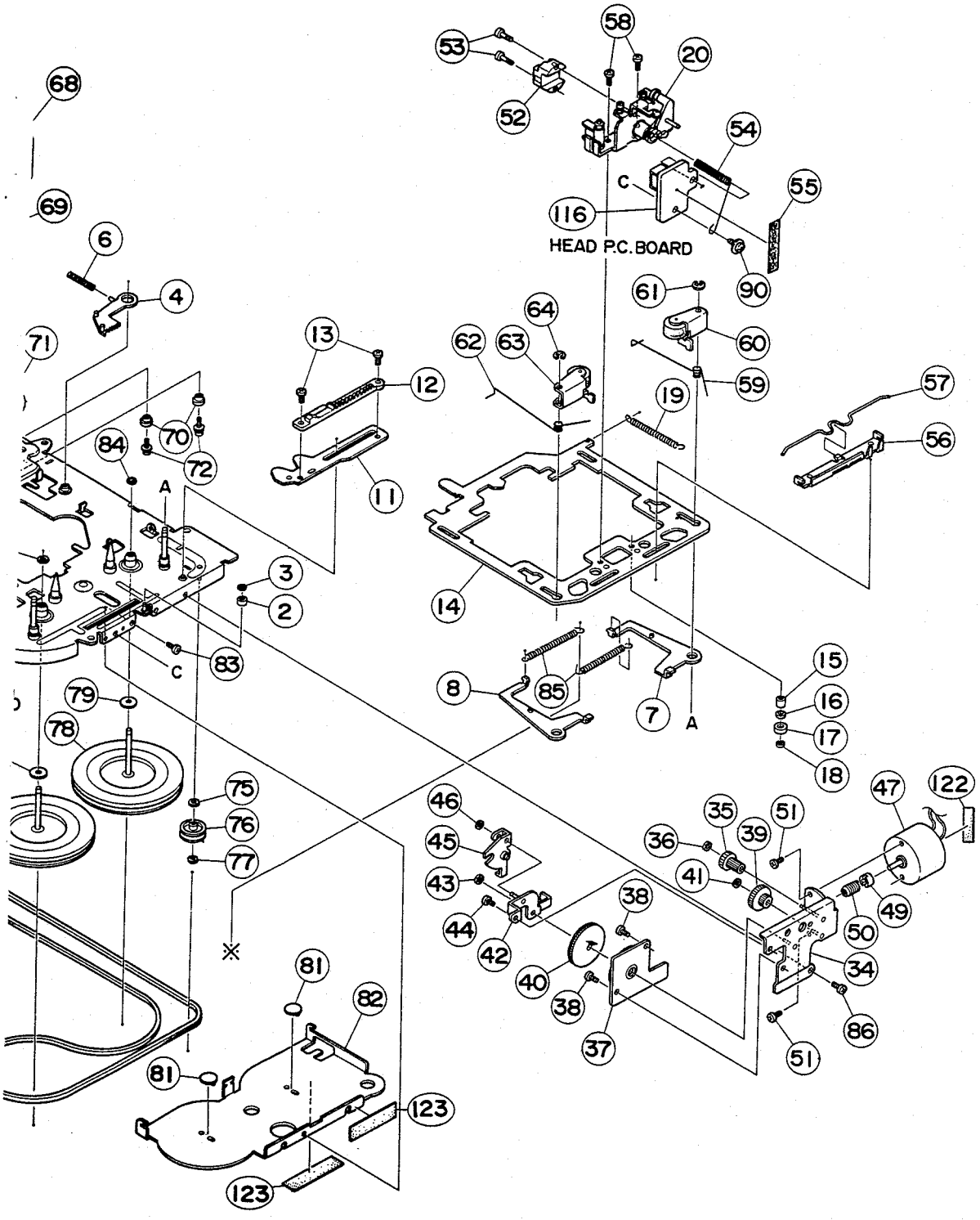
8 Exploded View of Enclosure Assembly




24
5
14
13
29
12
30
15
12
H
G
E
F
23
10
25
17
D'
4
B
52
55
54
61
53
55
54
51
50
8

9 Exploded View of Mechanismn Component




HEAD P.C.BOARD

■ Parts List of Enclosure Assembly

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	QTY
	1	VKS2191-001	FRONT CHASSIS		1
	2	VMA4396-002	SHIELD PLATE	FRONT CHASSIS	1
	3	VKM3234-20A	SIDE BRACKET		1
	4	VKL2458-201	SIDE BRACKET(R)		1
	5	VJC3191-002	REAR PANEL		1
	6	VKM3230-002	MECHA BRACKET		1
	7	VKM3216-003	TOP COVER		1
	8	VKM3215-201	BOTTOM COVER		1
	9	VMA3162-003	INSULATOR	FOR BOTTOM COVER	1
	10	VKL6610-001	PWB HOLDER	FOR IF/RF BOARD	1
	11	VKL6643-001	BOARD HOLDER	AM/FM BOARD	1
	12	VKZ4553-001	SPECIAL SCREW	FOR IC BRACKET	2
	13	VKZ4553-002	SPECIAL SCREW	FOR IC BRACKET	1
	14	VKZ4345-001	SPECIAL SCREW	FOR REAR	2
	15	VKZ4345-001	SPECIAL SCREW	FOR REAR	1
	16	SDST2605Z	SCREW	FOR MECHA.BRACKET	1
	17	SDST2605Z	SCREW	FOR MECHA.BRACKET	1
	18	SDST2605Z	SCREW	FOR FRONT	1
	19	SDST2605Z	SCREW	FOR FRONT	1
	20	SDST2605Z	SCREW	FOR MAIN BOARD	1
	21	SDST2605Z	SCREW	SIDE(L)	1
	22	VMA4361-002	SHIELD PLATE		1
	23	SDST2605Z	SCREW	REF.NO.10,IC BRACKET	1
	24	SPST2605Z	SCREW	FOR MECHANISM	2
	25	SDSF2608Z	SCREW	FOR MECHANISM	2
	26	SDSF2608Z	SCREW	FOR LCD BOARD	2
	27	SDSF2608Z	SCREW	MAIN BOARD,F.CHASSIS	2
	28	VKZ4333-001	SPECIAL SCREW	REAR,	2
	29	LPSP2605Z	SCREW	FOR TOP COVER	1
	30	LPSP2605Z	SCREW	FOR BOTTOM COVER	1
	31	VJC1848-002	NOSE PIECE		1
	32	VJK2170-001	LIGHT LENS		1
	33	VJK3485-001	KNOB LENS		1
	34	VMA4389-201	EARTH PLATE	LCD	1
	35	SPSN1740Z	SCREW	NOSE,KNOB LENS	1
	36	SPSN1740Z	SCREW	NOSE,PRESET BUTTON	2
	37	SPSN1780N	MINI SCREW	NOSE,SW.BOARD	4
	39	VJC4135-017	CASSETTE LID	INCLUDABEL NO.31	1
	40	VKW4464-007	SHAFT	INCLUDABEL NO.31	1
	41	VKW4803-001	LID SPRING	INCLUDABEL NO.31	1
	42	VXP3344-004	PRESET BUTTON	PRESET 1-6	1
	43	VXP3345-001	PUSH BUTTON	FF&REW	1
	44	VXP3346-001	PUSH BUTTON	EJECT&SKIP	1
	45	VXL4295-00A	VOL KNOB ASS'Y		1
	46	VXL4287-001	FADER KNOB		1
	47	VXL4333-002	KNOB	BASS/TREBLE	2
	48	VYN3222-001SA	NAME PLATE		1
	49	VKZ4521-004	SPECIAL SCREW	SLEEVE ASS'Y	1
	50	VJC3138-003	TRIM PLATE		1
	51	VKL2466-20A	SLEEVE ASS'Y		1
	52	VMP3099-801	C.CORD ASS'Y		1
	53	VKZ4552-001	SPECIAL SCREW	REF.NO.52	2
	54	VKY4575-001	LOCK SPRING	REF.NO.52	2
	55	SDST2605Z	SCREW	REF.NO.52	2

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	QTY
	56	VKL6038-00H	HANDLE ASS'Y		1
	57	VKZ4367-002	SPECIAL SCREW	HANDLE ASS'Y	2
	58	VGL1068-001	LCD	LCD1	1
	59	VYH2227-204	LCD HOOD		1
	60	VJK4338-201	LCD SCREEN		1
	61	VND4292-003	CAUTION LABEL	SLEEVE ASS'Y	1
	62	SPSP2004M	SCREW	NOSE,SIDE(L,R)	4
	64	SSST2606Z	SCREW	REF.NO.11	1
	70	VXP4912-011	PUSH BUTTON		5
	71	VXP4912-012	PUSH BUTTON	'DOLBY'	1
	72	VXP4912-015	PUSH BUTTON	'RPT'	1
	73	VXP4912-014	PUSH BUTTON	'TPS'	1

■ Mechanismn Component Parts List

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	QTY
	1	VKL1273-00B	CHASSIS ASS'Y		1
	2	VKH5078-001	COLLAR	FOR CHASSIS	1
	3	WDL122525-4	SLIT WASHER	FOR CHASSIS	1
	4	VKS5040-001	BRAKE(FWD)		1
	5	VKS5041-001	BRAKE(REV)		1
	6	VKW3001-220	COMP.SPRING	FOR BRAKE F/R	2
	7	VKL6324-001	T.U.LEVER(FWD)		1
	8	VKL6325-001	T.U.LEVER(REV)		1
	9	VKL6326-00A	LOCK ARM ASS'Y		1
	10	VKW3002-229	TENSION SPRING	LOCK ARM-CHASSIS	1
	11	VKL6327-001	ACTUATOR PLATE		1
	12	VKS5042-001	ACTUATOR RACK		1
	13	SPSK2020M	MINI SCREW	FOR ACT.RACK	2
	14	VKL2346-00A	HEAD BASE ASS'Y		1
	15	VKH5078-002	COLLAR	FOR HEAD BASE	1
	16	WFM163213	WASHER		1
	17	VKH3000-136	COLLAR	FOR HEAD BASE	1
	18	WDL122525-4	SLIT WASHER	FOR HEAD BASE	1
	19	VKW3002-230	TENSION SPRING	H.BASE-CHASSIS	1
	20	VKL3942-00A	H.M.BASE ASS'Y		1
	21	VKL2349-00A	REEL BASE ASS'Y		1
	22	VKL6330-00A	T.U.BASE ASS'Y		1
	23	REE2500	E.RING	FOR T.U.BASE	1
	24	VKR4487-00A	DRIVE CL.ASS'Y		1
	25	WDL122525-4	SLIT WASHER	FOR DRIVE CL.	1
	26	VKR4491-00A	REEL DISK ASS'Y		2
	27	WDL122525-4	SLIT WASHER	FOR REEL DISK	2
	28	VKB3000-115	BELT		1
	29	VKS3346-001	BELT HANGER	FOR BELT	1
	30	VKR4495-00A	T.U.CL.ASS'Y		1
	31	WFM163025	WASHER	FOR T.U.CL.	1
	32	VKL6332-00A	F/R BASE ASS'Y		1
	33	WDL122525-4	SLIT WASHER	FOR F/R BASE	1
	34	VKL3945-00A	A.GEAR BRACKET		1
	35	VKS5044-001	A.GEAR (2)		1
	36	WDL122525-4	SLIT WASHER	FOR A.GEAR(2)	1
	37	VKZ3143-00C	MODE SWITCH		1
	38	SPSK2020M	MINI SCREW	FOR MODE SWITCH	2
	39	VKS5045-001	A.GEAR (3)		1
	40	VKS3322-001	CAM GEAR		1
	41	WDL122525-4	SLIT WASHER		1
	42	VKL6334-00A	DIR.L.BBRACKET		1
	43	WDL122525-4	SLIT WASHER	FOR DIR.LEV.BKT	1
	44	SPSK2020M	MINI SCREW	FOR DIR.LEV.BKT	1
	45	VKL6336-00A	DIR.LEVER ASS'Y		1
	46	WDL122525-4	SLIT WASHER	FOR DIR.LEVER	1
	47	MDN-4RB7MYA	A.MOTOR		1
	48	WFM203025	WASHER		1
	49	VKS5046-001	A.MOTOR BUSHING		1
	50	VKS5047-001	A.GEAR (1)		1
	51	SPSK2025M	MINI SCREW	FOR A.MOTOR	2
	52	VGH0424-024	PB HEAD		1
	53	VKZ4291-004	SPECIAL SCREW	FOR PB HEAD	2
	54	VKW4733-001	WIRE COVER		1
	55	VYSA1R4-083	SPACER		1
	56	VKL6338-001	DIRECTION PLATE		1
	57	VKW4711-002	P.R.SPRING	FOR DIR.PLATE	1
	58	SPSK2025M	MINI SCREW	FOR H.M.BASE	2
	59	VKW4712-001	RETURN SPRING	FOR P.R.ASS'Y(F)	1
	60	VKP4190-00A	P.R.ASS'Y (F)		1

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	QTY
	61	REE1500	E.RING	FOR P.R.ASS'Y(F)	1
	62	VKW4713-001	RETURN SPRING	FOR P.R.ASS'Y(R)	1
	63	VKP4192-00A	P.R.ASS'Y (R)		1
	64	REE1500	E.RING	FOR P.R.ASS'Y(R)	1
	65	VGP0706-002	DC SOLENOID		1
	66	SPSH2055M	MINI SCREW	FOR SOLENOID	1
	67	WDL163525-4	SLIT WASHER	FOR FLAPPER	1
	68	HCT-3RF2AX	CAPSTAN MOTOR		1
	69	VKR4499-001	MOTOR PULLEY		1
	70	VKS5115-001	MOTOR COLLAR		2
	71	VKZ4483-002	MOTOR SPACER		1
	72	DPSP2005Z	SCREW	FOR CAPSTAN MOTOR	2
	74	SPSK2025M	MINI SCREW	FOR REEL UNIT	1
	75	WFM163013	WASHER		1
	76	VKR4500-001	CENTER PULLEY		1
	77	WDL122525-4	SLIT WASHER	FOR C.PULLEY	1
	78	VKF4182-00B	F.W.ASS'Y		2
	79	WFM197025	WASHER	FOR F.W.ASS'Y	2
	80	VKB3000-114	BELT		1
	81	VKS5048-001	THRUST HOLDER		2
	82	VKL3947-001	FW BRACKET		1
	83	SPSK2025M	MINI SCREW	FOR FW BRACKET	1
	84	VKZ4434-001	WASHER	FOR OIL CUT	2
	85	VKW3002-236	TENSION SPRING	FOR T.U.BASE-LEVER	2
	86	SPSK2025M	MINI SCREW	FOR A.GEAR UNIT	1
	87	SPSK2025M	MINI SCREW	FOR HOLDER BASE	3
	88	REE1500	E.RING	FOR HOLDER BASE	1
	89	SPSK2025M	MINI SCREW	FOR AUTO P.C.BOARD	1
	90	DPSP2005Z	SCREW	FOR HEAD P.C.BOARD	1
	91	SPSK2025M	MINI SCREW	FOR SWITCH P.C.B	1
	92	VKL6342-001	P.C.B.BRACKET		2
	93	SDST2604Z	SCREW		2
	94	VKL1276-00B	HOLD BASE ASS'Y		1
	95	VKL2355-002	CASSETTE HOLDER		1
	96	VYSA1R3-030	SPACER		1
	97	VKL2351-00A	LIFTER ASS'Y		1
	98	VKH3001-078	FLANGE COLLAR	FOR LIFTER	1
	99	SPSJ1730M	MINI SCREW	FOR LIFTER	1
	100	VKL2353-00B	L/E SLID ASS'Y		1
	101	VKS5049-001	LOADING RACK		1
	102	SPSK2025M	MINI SCREW	FOR LOADING RACK	2
	103	VKH3000-132	COLLAR	FOR R.SLIDER	1
	104	REE1500	E.RING	FOR R.SLIDER	1
	105	VKS3335-00B	CASSETTE SLIDER		1
	106	VKH5077-001	C.SLIDER COLLAR		1
	107	VKL3948-00A	LOADING LEVER		1
	108	REE1500	E.RING	FOR LOADING LEV	1
	109	VKL3950-00B	EJECT LEVER		1
	110	VKL6341-002	EJ.LOCK ARM		1
	111	VKW4731-001	EJ.LOCK SPRING	FOR EJ.LOCK ARM	1
	112	REE2000	E.RING	FOR EJ.LOCK ARM	1
	113	VKS5050-001	CHROME SW.ACT.		1
	114	VKS5051-001	IN.SW.ACTUATOR		1
	115	VKS5052-002	START S.ACT.	SWITCH ACTUATOR	1
	116	————	HEAD RELAY BOARD		1
	117	————	MECHANISM SWITCH BOARD		1
	118	————	SENSOR BOARD		1
	119	————	DRIVE BOARD		1
	120	VKW3005-022	TENSION SPRING		1
	121	VKW4762-001	EJECT SPRING	FOR EJ.LEV. ASS'Y	1
	122	VYSA1R4-083	SPACER		1
	123	VYSA1R4-056	SPACER		4
		VYSA1R4-056	SPACER		1
	124	VYSH103-054	SPACER	FOR R.SLIDER	1

10 Packing

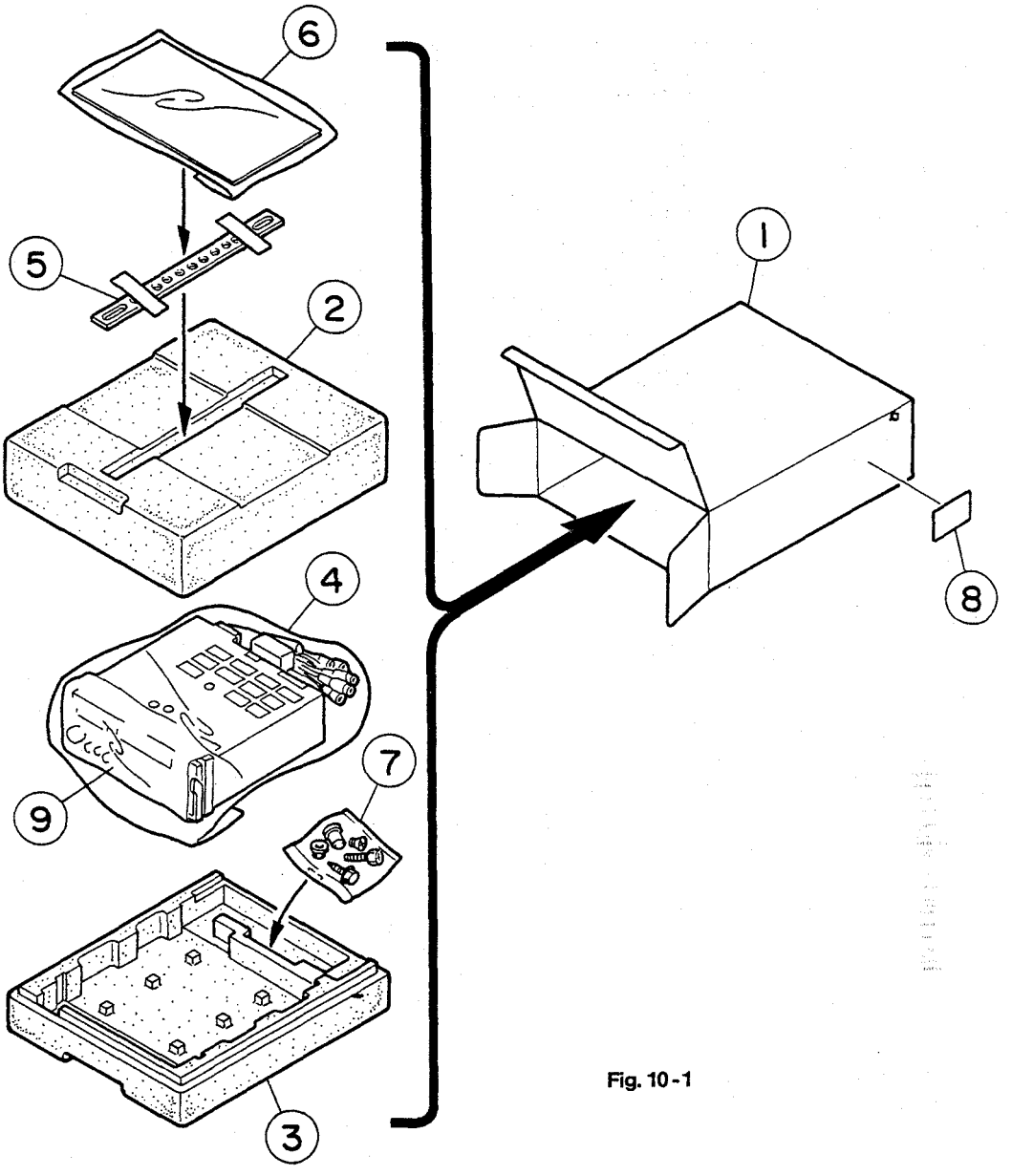


Fig. 10-1

Packing Parts List

Ref.No	Parts No.	Parts Name	Remarks	Q'ty
1	VPC3222-001	Carton		1
2	VPH1453-001	Cushion(U)	for Upper	1
3	VPH1454-001	Cushion(L)	for Lower	1
4	QPGA027-04505	Poly Bag	for Set	1
5	QPGB017-02404	Poly Bag	Instruction Book	1
6	QPGA007-01003	Poly Bag	for Bolt Ass'y	1
7	VND3046-001	Serial Ticket	for Carton	1
8	VPK3001-003	Sheet	for Protection	1

Accessories Parts List

Ref.No	Parts No.	Parts Name	Remarks	Q'ty
	VNN3222-291	Instruction Book		1
	VND4294-001	Warranty Card		1
	PU36158	FTZ Information sheet		1
	VNC2400-057	Q.REF.Card		1
	VND4342-00A	Identity Card		1
	VND3060-001	Identity Card	Serial Label	1
1	SSSP5006Z	Screw	Bolt Ass'y	4
2	VKZ4027-002	Plug Nut		1
3	VKH4871-001	Mount Bolt		1
4	VKZ4328-001	Lock Nut		1
5	VKZ4025-001	Bolt		1
6	VKZ4328-002	Lock Nut		1
7	WNS5000Z	Washer		1
8	VKL5460-001	Stay		1